CHAPTER 3: PUBLIC FACILITIES, SERVICES AND RESOURCES

THIS DRAFT PLAN COMBINES AND DISPLAYS ALL TEXT FROM CHAPTERS 3 AND 5 OF THE EXISTING PLAN, WHICH WILL BE **COMPLETELY** REPLACED BY ALL NEW TEXT, TABLES AND FIGURES.

EXISTING TEXT TO BE DELETED IS INDICATED BY THE USE OF A SMALLER FONT SIZE AND VERTICAL BLACK BARS ALONG THE LEFT AND RIGHT MARGINS. PROPOSED NEW TEXT IS NOT HIGHLIGHTED IN ANY WAY, EXCEPT BY USE OF A LARGER FONT AND THE ABSENCE OF THE BLACK VERTICAL BARS.

TABLE OF CONTENTS

Figure ***Page***

Table ***Page***

TABLE OF CONTENTS

I. INTRODUCTION

This chapter discusses the availability of public facilities, services and resources for the Estero Planning Area. Appropriate levels of service for urban, suburban and rural areas are discussed in Chapter 3 of Framework for Planning, Coastal Zone. Information about existing service levels is current as of mid-2001 or later.

A. MONITORING THE AVAILABILITY OF RESOURCES: THE RESOURCE MANAGEMENT SYSTEM

To monitor the relationship between resources and demand levels, the county has developed the Resource Management System (RMS). The RMS monitors water supply, sewage disposal, schools, roads, air quality and parks, using three "levels of severity" to inform decision makers of current and potential deficiencies.

The status of resources monitored by the Resource Management System (RMS) is frequently updated as new information becomes available. Current RMS Levels of Severity may be found in Appendix D of Framework for Planning, Coastal Zone. More detailed resource information is included in the most recent edition of the Annual Resource Summary Report. RMS procedures are fully discussed in Framework for Planning, Coastal Zone, Chapter 3.

The primary purpose of the resource management system is to provide an alert process for a timely identification of potential resource deficiencies so that sufficient lead time is allowed for correcting or avoiding a problem. This chapter initiates the resource management system by summarizing assessments of the major resources of water supply, sewage disposal, schools, and road capacity. In conjunction with those assessments, population thresholds have been estimated for three levels of severity for each resource. Since population thresholds are estimates however, changes in the population growth, resource consumption or other factors may change estimated thresholds. Data developed for this report will be reviewed and updated annually as part of the general plan review process.

Resource capacity information is included in this area plan to support ongoing county review of needs for capital programs and provide information to the public on the status of county resources. This information is not to be used for reviewing individual development proposals or their consistency with the general plan. The use of resource capacity information by the county to evaluate individual development proposals can only occur through separate hearings and enactment of ordinances outside of the general plan. (An explanation of this procedure is in Framework For Planning, Chapter 4.)

The resources that appear to be experiencing deficiencies are summarized in Table C. Verification of the level of severity will occur after public hearings and Board of Supervisors action to certify the documentation on which these assessments are based.

TABLE C: RESOURCE SEVERITY LEVELS & POPULATION THRESHOLDS
ESTERO PLANNING AREA

South Bay Urban Area

	Levels of Severity		
Resources	I	II	III
Water Resources	6,100	8,500	12,600
Water System	N/A	N/A	N/A
Sewage Treatment Plant[1]	N/A	N/A	N/A
Schools			
Elementary	5,800	8,100	11,200
Secondary[2]	15,100	17,000	22,000
Roads/Circulation[3]	9,200	10,000	18,500

Morro Bay Urban Area

	Levels of Severity		
Resources	I	II	III
Water Resources	N/A	N/A	N/A
Water System	N/A	N/A	N/A
Sewage Treatment Plant[4]	13,200	13,600	15,500
Schools			
Elementary	--	--	--
Secondary[2]	15,100	17,000	22,000
Roads/Circulation	N/A	N/A	N/A

Cayucos Urban Area

	Levels of Severity		
Resources	I	II	III
Water Resources	2,700	2,800	3,100
Water System	--	--	--
Sewage Treatment Plant[4]	13,100	13,600	15,500
Schools			
Elementary	--	--	--
Secondary[2]	5,000	5,500	6,300
Roads/Circulation	N/A	N/A	N/A

Notes:
1. The need for a sewage treatment plant is closely related to water supply; however, water quality will need further study to determine population thresholds.
2. Population of Estero Planning Area excepting Cayucos.
3. Los Osos Valley Road.
4. Combined population of Morro Bay and Cayucos.
5. Combined population of Cayucos and North Coast Planning Area.

B. RELATIONSHIP TO PLANNING POLICIES AND PROGRAMS

The County General Plan contains goal statements that apply to the provision of public facilities and services and the conservation of resources. As expressed in the Coastal Zone Framework for Planning, these broad goals include:

Relationship to Planning Policies and Programs

- "Balancing the capacity for growth allowed by the Land Use Element with the sustained availability of resources."
- "Conserving nonrenewable resources and replenishing renewable resources."
- "Providing the lead time necessary to fund and put in place public services necessary to support the population growth, considering the county's and taxpayers' financial ability to provide them."
- "Require consideration of the timely availability of funding as an integral part of expanding public facilities and services."
- "Avoiding the use of public resources, services and facilities beyond their renewable capacities."
- "Planning for and monitoring new development through the resource management system and growth management strategies, to ensure that resource demands will not exceed existing and planned capacities or service levels."
- "Planning new land uses that avoid overburdening existing resources, services and facilities."

The incorporated city of Morro Bay is responsible for land use planning and for the provision of public services to all areas within its boundaries. Outside the city limits, future areas for city growth are defined by urban reserve lines. Urban reserve lines also define growth areas around the unincorporated communities of Cayucos and Los Osos, where special districts and private companies provide some, but not all, of the services provided by incorporated cities. In unincorporated areas, land use planning is the county's responsibility.

Morro Bay Fringe

The city of Morro Bay is responsible for the administration and planning of all areas lying within the city's boundary. The urban reserve line is located at the existing city limits. This reflects the existing service constraints, as well as the availability of substantial areas for infill.

II. PUBLIC FACILITIES, SERVICES AND RESOURCES: STATUS, NEEDS, POLICIES

Public services and facilities are provided in the Estero Planning Area by San Luis Obispo County, the City of Morro Bay and a variety of special purpose districts, including school districts, water districts, private water companies, fire protection districts, sanitary districts, drainage districts and street lighting districts. The incorporated City of Morro Bay provides all of these functions for properties within its city limits. The boundaries of the special districts supplying these services in Cayucos are shown in Figure 3-1.

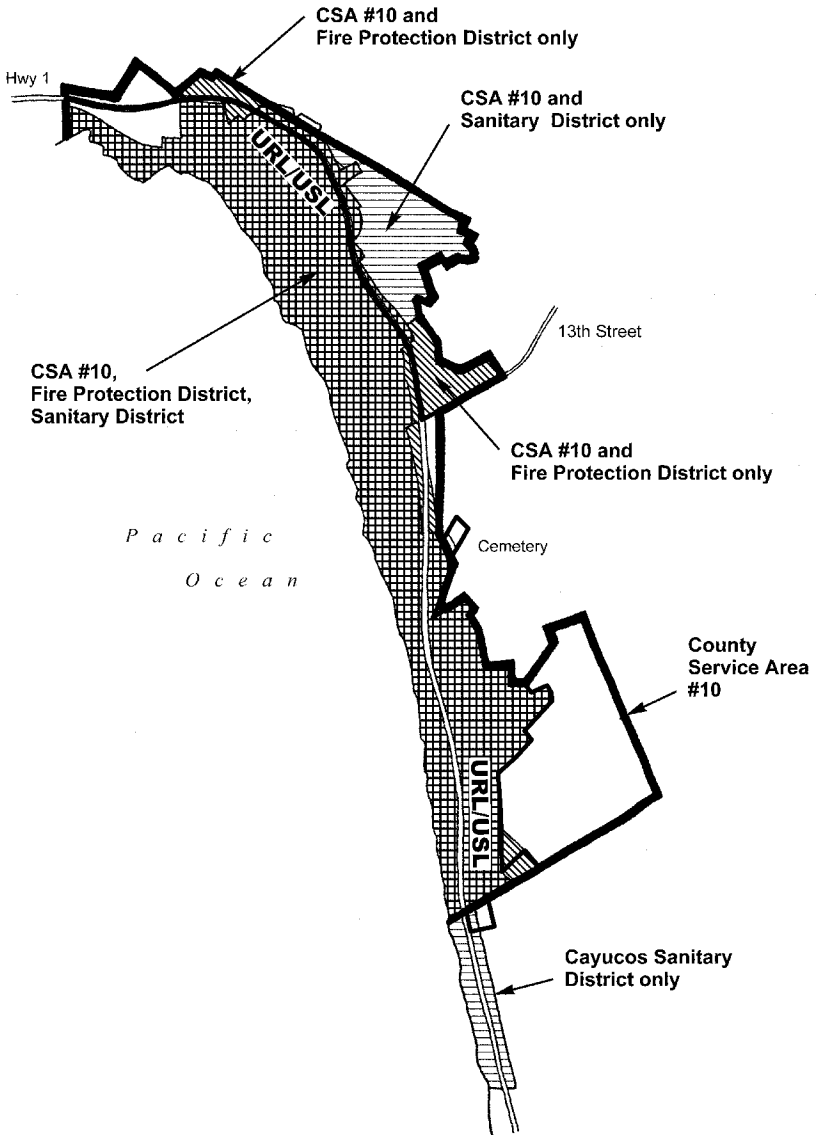

Figure 3-1: Service Providers - Cayucos

Services in Los Osos are provided primarily through the Los Osos Community Services District (LOCSD). Within the boundaries of the LOCSD, some services are provided to the entire district and others to smaller specific zones of benefit. The LOCSD zones of benefit are shown in Figure 3-2, below. Additional water service is provided by California Cities Water Company and S & T Mutual Water Company. Service areas for water supply are shown in Figure 3-4.

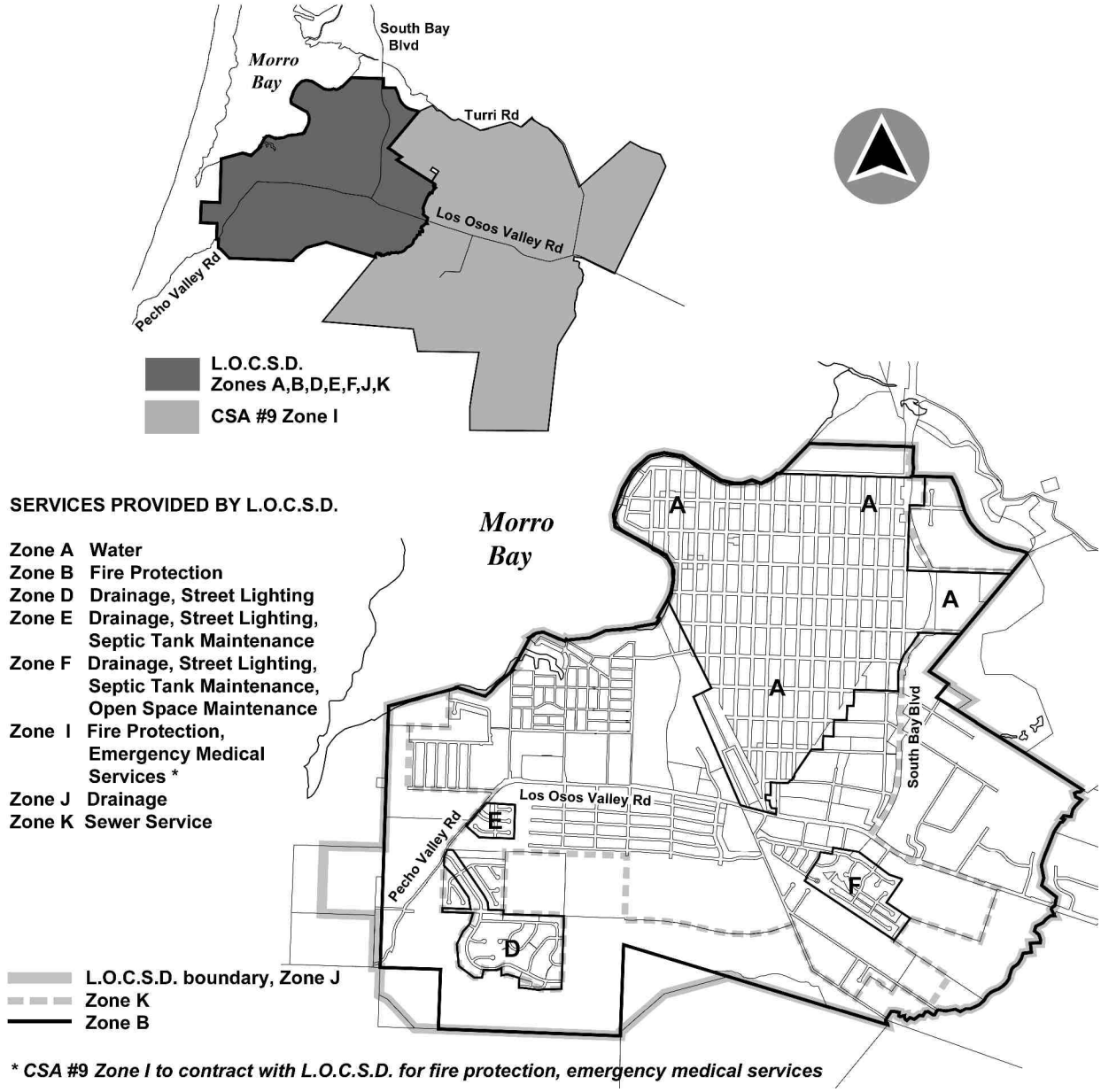

Figure 3-2: LOCSD, Zones of Benefit - Los Osos Area

A. Water Supply

1. Areawide Water Supply

Policy: Monitor water demand through the Resource Management System to assure that new development can be supported by available water supplies without depleting groundwater supplies and/or degrading water quality.

Water supplies in the Estero Planning Area consist of surface and sub-surface flow in several coastal streams, the groundwater basins associated with those streams, and Whale Rock Reservoir. Summaries of groundwater basin characteristics are contained in Table 3-1.

Total estimated water supplies available to water users within the Estero Planning Area, including the city of Morro Bay, are about 11,840 afy. This includes about 9,280 afy from groundwater basins as shown in Table 3-1, 600 afy from Whale Rock Reservoir, 1,313 afy from the State water project in the city of Morro Bay, and 645 afy from the Morro bay desalination plant. The Lake Nacimiento water project and the Los Osos sewer project could increase the total supplies to about 12,435 afy.

Table 3-1: Characteristics of Groundwater Basins, Estero Planning Area [1]

Basin	Usable Storage (acre-feet)	Estimated Basin Yield (acre-feet/yr)	Current Use
Villa Creek	2,200	1,000[2]	Agriculture; domestic use
Cayucos Creek	1,300	600[2]	Agriculture; domestic use
Old Creek	1,500	330[8]	Agriculture; domestic use
Toro Creek	1,000	591[3]	Agriculture; domestic use
Morro Creek	7,000	1,500[4]	Municipal (Morro Bay); agriculture
Chorro Creek	7,000	1,700[5]	Municipal (Morro Bay); agriculture
Los Osos	14,506[6]	3,560/3,940[7]	Municipal (Los Osos); domestic; agriculture
Total	35,500	9,281/9,661	

1 Sources: SLO County Master Water Plan Update, 1986 and 1998, except as noted
2 Safe seasonal yield
3 Percolation of precipitation
4 Groundwater yield
5 SLO Dept. of Planning & Building, based on Cleath & Assoc.
6 Much of total usable storage underlies the ocean
7 Safe annual yield without/with a community sewer system, per John L. Wallace & Associates in association with Cleath & Associates, Los Osos Community Services District Draft Water Master Plan, August 2002
8 Represents water rights of users upstream of Whale Rock Reservoir

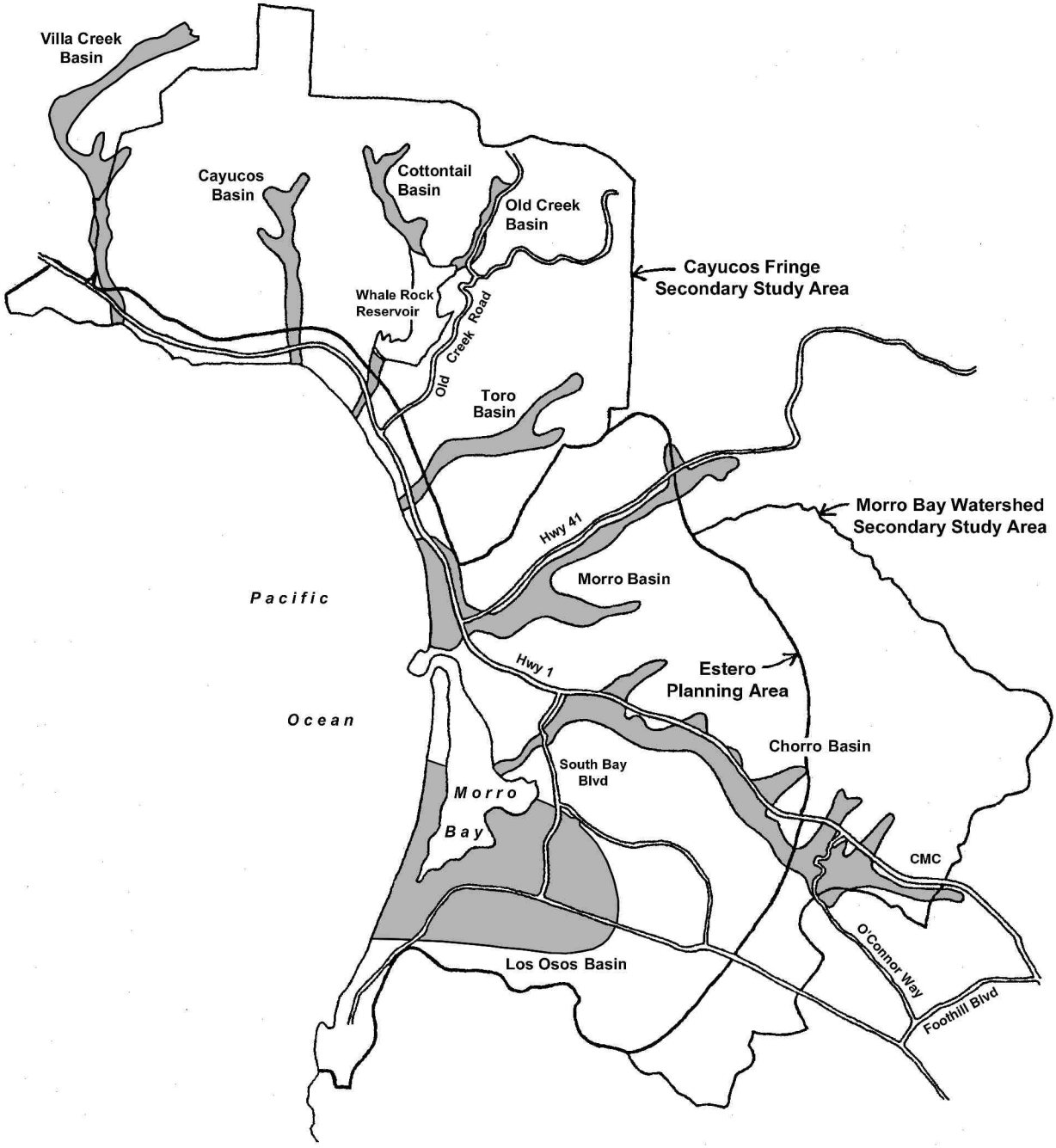

Figure 3-3: Groundwater Basins - Estero Planning Area

Comparison of Supply and Demand. Table 3-2 compares estimated future water demand to projected water supplies within the Estero Planning Area to help estimate the planning area's capacity to support additional development.

In Cayucos, projected water supply (includes 160 acre-feet per year in connection with the Lake Nacimiento water project) would be sufficient to accommodate projected demand at buildout, assuming an increasing percentage of residential occupancy over time.

In Los Osos, an August 2002 Draft Water Master Plan prepared for the Los Osos Community Services District concludes that with the proposed community sewer system, water conservation, and a proposed recycling program, future water demand at buildout within the Los Osos groundwater basin would be in balance with the estimated safe yield of the basin, assuming drought conditions. This plan projects a lower population buildout than the Water Master Plan (and hence a lower water demand), thus providing an extra degree of assurance that demand will be in balance with safe yield at buildout.

In both Los Osos and Cayucos, implementation of water conservation measures may significantly reduce water demand. For example, replacement of older toilets with ultra low-flush models will reduce demand by about 15 percent. (Source: California Urban Water Conservation Council: various studies of the water savings due to replacement of old toilets with 1.6-gallon-per-flush toilets).

Table 3-2: Water Supply and Demand: Estero Planning Area (acre-feet per year)

Location	Supply						Demand
	Current				Projected		Projected Demand at Buildout
	Surface Water	Desal-ina-tion	Ground-water	State Water	Lake Naci-miento	Total Supply	
Cayucos: Community	582 [1]	-	-	-	160	742	499-735[10]
Cayucos: Cemetery	18 [1]	-	-	-	-	18	18
Cayucos: Total	600 [1]	-	-	-	160	760	517-753[10]
Morro Bay: Agriculture	-	-	[2]	-	-	-	2600 [8]
Morro Bay: Golf course	-	-	[2]	-	-	-	180
Morro Bay: PG&E	-	-	[2]	-	-	-	30
Morro BayPrivate wells	-	-	[2]	-	-	-	60[8]
Morro Bay: Community	-	645	[2]	1313	55 [4]	-	2070[9]
Morro Bay: Total		645	3200 [3]	1313	55	5213	4940
Los Osos: Agriculture	-	-	[5]	-	-	-	800
Los Osos: Community	-	-	[5]	-	-	-	3000[6]
Los Osos: Private wells	-	-	[5]	-	-	-	200
Los Osos: Total	-	-	3560 [6]	-	-	3940	4000[6]
Villa Creek Basin	-	-	1000 [11]	-	-	1000	475
Old Creek Basin	-	-	330 [12]	-	-	330	160
Cayucos Creek Basin	-	-	600 [11]	-	-	600	265
Toro Creek Basin	-	-	591[11]	-	-	591	60
Planning Area Total	11839				215	12434	10417-10653

1 Whale Rock Reservoir
2 Supply is some portion of combined supplies of Morro Valley and Chorro Valley groundwater basins
3 Morro Valley Basin,1500 afy (Cleath, 1993). Chorro Valley Basin, 1700 afy (Est based on Cleath, 1993)
4 Requested by San Luis Coastal Unified School District for Morro Bay High School
5 Supply is some portion of total supply from Los Osos Valley groundwater basin
6 John L. Wallace & Associates in connection with Tim Cleath & Associates, Los Osos Community Services District Draft Water Master Plan, August 2002; current supply assumes use of septic systems; projected supply is with a community sewer system
7 City of Morro Bay Water Management Plan (Final Draft), Appendix B, "Groundwater Analysis", Cleath & Associates, 1993
8 Estimate based on Cleath, 1993
9 Based on buildout population of 13,100; 141 gpcd use rate
10 Varies, based on different scenarios; see Table 3-3
11 San Luis Obispo County Master Water Plan Update, 1998
12 Represents water rights of users upstream from Whale Rock Reservoir

A. WATER SUPPLY

Assuring adequate future water supplies is one of the most critical resource management needs in the Estero Planning Area. South Bay and Morro Bay are presently dependent solely on local groundwater resources. Cayucos, however, is better off with an assured allocation from Whale Rock Reservoir, which will meet its needs for some years.

The following table (Table D) is an inventory of existing local water sources, major uses, and safe yields. Safe yield amounts are derived from the county Master Water and Sewerage Plan except for the update for the Los Osos basin derived from the Brown and Caldwell Report of 1974.

Water usage in South Bay and Morro Bay must also consider impacts on rural and agricultural users drawing water from the same groundwater basins. Another major concern, particularly in South Bay, is protection of water quality from the combined gradual degradation impacts of excessive withdrawals approaching or slightly exceeding safe yields, seawater intrusion in wells too close to Morro Bay or the ocean, septic tank wastewater recharge from extensive residential development, and leaching of agricultural chemicals.

All three urban areas are relatively close and could mutually benefit by pooling efforts to obtain imported water supplies necessary for continued growth while stabilizing groundwater supplies needed for irrigated agriculture and rural uses. One problem is that citizens are divided in opinion on how much their communities should grow. Importing water and developing or expanding community sewer systems would assure steady growth, while depending on existing resources would curtail development. The objective of this section, however, is to indicate the population levels at which an imported water supply system needs to be planned and constructed. Since each community is supplied by different groundwater basins, each is discussed separately.

TABLE D - WATER RESOURCES-ESTERO PLANNING AREA

Water Resources	Principal Uses	Safe Yield (AF/Yr.)
Los Osos Groundwater	South Bay Domestic Use, Los Osos Valley Ag. Use.	1,300 - 1,800[1]
Chorro Creek Groundwater Basin	City of Morro Bay Domestic Use, Morro Bay Golf Course and Chorro Valley Ag. Uses	1,500
Morro Creek Groundwater Basin	City of Morro Bay Domestic Use, Morro/Little Morro Valleys Ag. Use	1,700
Torro Creek Groundwater Basin	Agriculture Use	530
Old Creek Groundwater Basin	Cayucos Domestic Use	330

Whale Rock Reservoir	3,740 a.f.y. exported, mostly to SLO; 660 a.f.y. maximum entitlement for Cayucos by recharge of Old Creek Basin	---
Cayucos Creek Groundwater Basin	Agriculture Use	630
Villa Creek Groundwater Basin	Agriculture Use	1,030

(See next page for Notes)

Notes:

1. Estimated by the State Department of Water Resources. Safe yield of the Los Osos basin was updated by Brown and Caldwell, consultants, 1974.

B. UTILITY SERVICES

Water Supply

Ensuring an adequate water supply is an important goal for the future development of the Estero Planning Area. Decisions involving the need and timing of supplemental water will have far reaching implications for all of the planning area, which is presently dependent on groundwater supplies for both urban and agricultural water. There are seven groundwater basins: Villa, Cayucos, Old, Toro, Morro, Chorro and Los Osos named for the principal streams which traverse them. The total storage capacity of these basins is estimated to be 130,000 acre-feet. The storage is replenished by stream percolation, precipitation, return flow of excess water applied for irrigation and other uses, and septic tank infiltration.

Comprehensive information on water resources is provided in the San Luis Obispo County Master Water and Sewerage Plan (1972). Additional study of the Los Osos groundwater basin was completed in 1974. Safe yield (the amount of water available for use without adversely altering the groundwater resources) is estimated to be between 7,500 and 8,000 acre-feet per year in the planning area. Comparing this to the estimated 7,500 acre-feet used illustrates that supplemental water will be necessary to serve projected growth in the near future.

Studies indicate that water supply and safe yield capabilities vary significantly for each basin. Agriculture is a major consumer of water, and modest agricultural growth is projected to continue during the next thirty years. Strong support for maintaining agricultural uses is reflected in the plan. Irrigated agricultural consumption was projected to increase from 4,900 acre-feet per year to 6,730 acre-feet per year between 1970 and year 2000 in the Master Water and Sewerage Plan.
In addition, the planning area is expected to show dramatic population growth from 22,400 in 1979 to 35,000 in 2000. Estimated demand for water resources to serve this population growth indicates an increase from 6,830 acre-feet per year to more than 11,000 acre-feet per year in 2000. It is apparent that supplemental water will be necessary even within the near future. It should be noted, however, that ratios of safe yield to projected demand vary and impacts to the local communities are highlighted for each urban area.

Three specific alternatives to meet the year 2000 demands for additional water are proposed in the Master Water and Sewerage Plan to provide for both the north and central coast. These include: 1) use of a pipeline for water from Nacimiento to Whale Rock Reservoir 2) construction of a 20,000 acre-foot reservoir at Yellow Hill on Arroyo de la Cruz and 3) development of a 15,000 acre-foot Santa Rosa Dam and Reservoir with a safe yield of 7,300 acre-feet. In addition, utilization of a portion of the State Water Project entitlement of 25,000 acre-feet or desalinization could provide supplemental water supplies for the Estero Planning Area. No final decision has been made at this time and resolution of the need for supplemental water must be addressed in the plans to ensure supplies for both urban and agricultural uses.

2. Cayucos Water Supply.

Policy: Facilitate provision of supplemental water to accommodate future development

Whale Rock Reservoir is operated by the City of San Luis Obispo, under the direction of the Whale Rock Commission. The reservoir has a storage capacity of 50,000 acre-feet. This capacity is reserved for use by the city of San Luis Obispo, the California Men's Colony, Cal Poly University, and Cayucos, which has an allocation of 600 acre-feet per year. Cayucos water customers receive the Whale Rock water through three separate water service districts that have cooperated to form the Cayucos Area Water Organization (CAWO). Water is piped from the reservoir to a water treatment plant and then to the distribution systems of the three purveyors. The purveyors have agreed among themselves to allocate the 600 acre feet as follows:

Paso Robles Beach Water Association	222 afy
Morro Rock Mutual Water Company	170 afy
County Service Area #10A	190 afy
Cayucos Cemetery District	18 afy
Total	600 afy

Water conservation programs have kept Cayucos within its allocation without the need for rationing. Over the past 10 years, total water production in the community has remained fairly constant at roughly 400 acre feet per year.

Projected Supply and Demand. CSA 10A and the Morro Rock View Mutual Water Company are interested in obtaining supplemental water through the Lake Nacimiento water project to provide sufficient water for the buildout population. Likewise, the Lewis C. Pollard Family Trust has requested supplemental water through the Lake Nacimiento project for an area on the west end of Cayucos. The total amount of supplemental water being requested is 160 acre feet per year. Assuming 70 percent occupancy for existing development and 95 percent for new development (Scenario 1 in the following Table 3-3), the community's water demand at buildout could be a little over 600 afy–the community's allocation–without retrofitting. However, based

on historic conditions, Scenario 2 is the most realistic estimate of future water demand. In that scenario, an approximately 87 percent occupancy rate for existing development and a 91 percent occupancy rate for new development could result in a buildout demand that is substantially higher than 600 afy without retrofitting. If Cayucos' existing residences and businesses were to have their plumbing fixtures replaced with ultra low-flow fixtures--many residences have already been retrofitted-- demand estimates would be reduced. For example, with 50 percent retrofitting (see footnote 2 below for definitions), future demand under Scenario 2 would be reduced from about 750 afy to 690 afy, but would exceed the community's current 600 afy allocation. With 100 percent retrofitting, future demand under Scenario 2 would be further reduced to about 625 afy, still somewhat in excess of the community's allocation. Several scenarios for projected water demand in Cayucos, together with their assumptions, are summarized in Table 3-3. These scenarios give different projections of water use in Cayucos. They are illustrative only. The actual amount of water needed for buildout will vary depending upon factors such as actual water usage, exact number of vacant parcels, and occupancy rates. None of these scenarios separates water demand and buildout by individual water purveyor.

Table 3-3: Projected Water Demand: Cayucos

Scenario	Number of Dwelling Units[1]	Water Demand[2] (acre-feet per year)		
		no retrofitting	50% retrofitting	100% retrofitting
1.[3]	2,505	619	568	517
2.[4]	**2,505**	**753**	**689**	**625**
3.[3]	2,772	693	622	591
4.[4]	2,772	823	759	695

1 Scenarios 1 and 2 reflect the buildout under this plan; Scenarios 3 and 4 reflect a buildout resulting from ~~**changing**~~ RMF density **of** ~~**to**~~ 15 dwelling units per acre ~~**through a general plan amendment; see land use program regarding multi-family density in the Chapter 4, Section VIB)**~~

2 Assumes the following:

- A 10% planning "cushion" is included in the demand figures as required by the Board of Supervisors
- Water use for existing development: 0.2643 acre-feet per dwelling per year
- Water use for new development: 0.2254 acre-feet per dwelling per year
- The ratio of residential to non-residential development will remain constant in the future such that residential development will account for about 86% of the total residential plus non-residential water demand
- Water demand for the cemetery will remain constant at 18 acre-feet per year
- "50 percent retrofitting" assumes a 10% reduction in water demand for existing residential development and a 5% reduction in water demand for existing non-residential development; "100 percent retrofitting" assumes 20% and 10% reductions, respectively

3 Assumes 70% occupancy for existing development; 95% for new development

4 Assumes 87.25% occupancy for existing development; 91% for new development. This scenario is currently seen as being the most realistic, as it is based on recent consumption and occupancy data provided by the Cayucos Area Water Organization water purveyors.

Cayucos - Water

Water service for Cayucos is provided by three different entities: Morro Rock View Mutual Water Company, Paso Robles Beach Water Association, and County Waterworks District No. 8. Each district supplies its customers from wells located adjacent to lower Old Creek, east of Highway 1. The three companies are entitled to a total allocation of 600 acre-feet per year from releases of Whale Rock Dam. In Mid-1985, data was presented that indicated the community was using all of the 600 ac. ft. allotment from the Whale Rock source and the resource management system was initiated. A building moratorium was later initiated to protect the community in December of 1985. While the physical facilities of each of these providers appear to be in good condition, of concern to Cayucos is developing additional sources of water. The issue of the need for supplemental water and available resources is discussed in the Resource Management chapter.

Cayucos - Water

Water service for Cayucos is provided by three different entities: Morro Rock Mutual Water Company, Paso Robles Beach Mutual Water Association, and County Waterworks District No. 8. Each district supplies its customers from wells located on Old Creek below Whale Rock Dam. These wells are recharged from water released from Whale Rock Reservoir in the allocated amount of 600 acre-feet per year. Water consumption involves a substantial seasonal resident and tourist demand. Wastewater is discharged through the Morro Bay sewage treatment plant and an ocean outfall line.

A Level III of severity for water supply is presently being experienced in Cayucos. As a result of the Level III severity situation, a building moratorium has been initiated in the community. Additional sources include importing water or developing local sources. For example, the Cayucos Creek groundwater basin contains a safe yield of 630 acre feet per year which might ultimately supplement community needs as well as permit continued irrigated agricultural use of Cayucos Valley. A secondary source may be imported water from Lake Nacimiento.

When any additional source is developed for Cayucos, the existing water supply system could be gradually improved and increased in capacity to meet future demands.

3. Los Osos Water Supply.

The sole water source in the Los Osos area is groundwater from the Los Osos groundwater basin. The groundwater is withdrawn from the basin by private wells, for agricultural irrigation, and for municipal use by three principal water purveyors. The service districts for these municipal purveyors are shown in Figure 3-4.

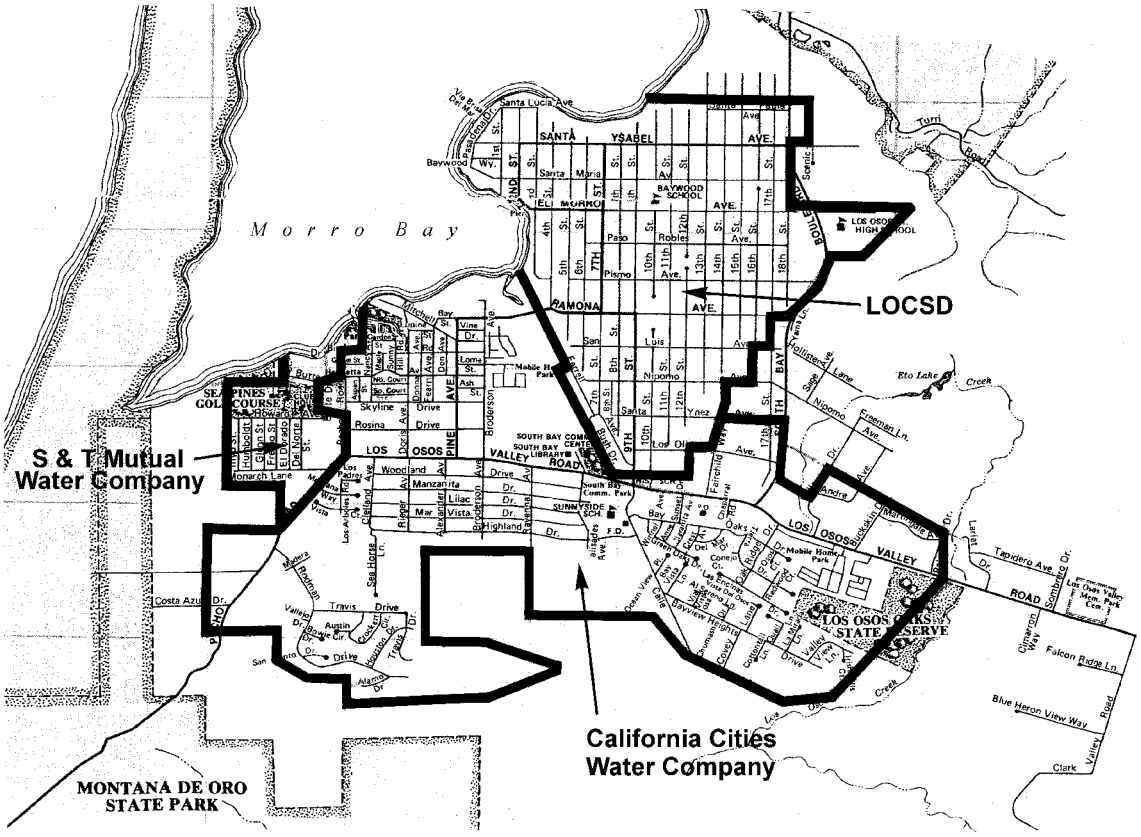

Figure 3-4: Water Service Districts - Los Osos Area

Projected Supply. A consultant study jointly sponsored by the Los Osos water purveyors has calibrated a computer model of the Los Osos groundwater basin that was previously developed by the United States Geological Survey. Using this model in conjunction with other analytical methodologies, an estimate of safe yield for the groundwater basin was determined, as reported in the Los Osos Community Services District's *Water Master Plan*, August 2002.

Safe yield of a groundwater basin can be defined as the average quantity of groundwater that can be pumped from a groundwater basin every year without causing water supply **and**/or water quality problems. According to the *Water Master Plan*, the groundwater basin's safe yield under current conditions (with no wastewater collection and treatment system) is estimated to be 3,560 acre-feet per year (afy). The safe yield with the proposed community wastewater system is

estimated to be 3,940 afy. Table 3-4 allocates the 3,940 afy to the major water users.

Table 3-4: Los Osos Valley Groundwater Basin Yield

User Class	Production (AFY) with sewer
LOCSD, Cal Cities, S&T	2,900
Sea Pines Golf Course	40
Private Domestic	200
Agriculture	800
Total	3,940

Source: Los Osos Community Services District Water Master Plan, August 2002

Historical Demand. Ground water production from the basin overall has exceeded the basin's safe yield in approximately half of the years between 1985 and 2000. In addition, groundwater production has been distributed in such a way as to cause excessive pumpage in some areas, resulting in sea water intrusion in the vicinity of Pecho Road. In other areas, pumpage has not been sufficient to offset recharge of wastewater from on-site septic systems, resulting in rising water levels. The addition of new wells and revised pumping patterns are expected to solve this problem.

Projected Demand. The *Water Master Plan* estimates water demand within the groundwater basin at buildout for the combined service areas of the community's three principal water purveyors, together with water demand for agricultural irrigation and private wells within the basin (demand from agricultural and private wells is held constant). The *Water Master Plan* estimates that the total water demand at buildout is 4,000 afy, which can be accommodated by the estimated safe yield of the groundwater basin under drought conditions, with the planned community sewer system, water conservation, and a proposed water recycling program. The population buildout figures used in the *Water Master Plan* are higher than those given in this plan, so that the estimated water demand should be somewhat higher than the demand at buildout under this plan. This could reduce the extent of the proposed water recycling program and provide an extra degree of assurance that demand will be in balance with safe yield at buildout.

The several components of demand should be closely monitored to ensure that expected water availability for urban use remains realistic. If necessary, general plan amendments should be initiated as needed to assure that the level of future development can be accommodated by the safe yield of the groundwater basin without seawater intrusion (see Chapter 4, Section VI, Programs).

South Bay - Water

Perhaps no factor is of greater concern today than the future availability of potable water for South Bay residents. Along with other north coastal communities, South Bay is threatened with a potentially inadequate water supply to meet increasing agricultural and urban water demands. Water is supplied entirely through groundwater extraction from the Los Osos basin which underlies the planning area, and is provided by three municipal water suppliers. Some portions of the suburban area are served by individual domestic wells.

South Bay is confronted with two basic problems. Groundwater extraction levels are rapidly increasing while groundwater quality is showing indications of possible deterioration.

Estimates of groundwater availability or safe yield (the average amount of groundwater which an be extracted over the long run without effecting an adverse change in groundwater storage volume) have been revised upward over time. Most recent estimates indicate a safe yield range of 1,300-1,800 acre-feet, although it may be as high as 3,100 acre-feet.

Of critical importance is that point at which net demand equals safe yield of the groundwater basin. The Master Water and Sewerage Plan projected this would occur in the late 1970's. Population projections indicate that importation of nearly 500 acre-feet per year will be necessary in the year 2000 without sewage treatment. With sewage treatment, importation of approximately 1,700 acre-feet will be necessary by then.

Research on groundwater quality implies a potential for long-term degradation in quality. A septic tank moratorium was proposed by the State Regional Water Quality Control Board for 1974. This was temporarily set aside and additional monitoring has been undertaken for the last six years. The potential need for sewering has been identified by the Regional Water Quality Control Board. Septic tanks return a large portion of the used water to the local groundwater basin, so impacts on water resources must be evaluated if sewering occurs. Resolution of water quality issues are intricately tied to the need for supplemental water and/or mandatory restrictions of water use.

Of additional concern is the impacts of water use for agricultural purposes. Competing demands from agricultural and urban users can affect the long-term protection of agriculture and the phasing of urban expansion. Expansion of historic agricultural water extractions can reduce opportunities for the design of urban services as water supplies are based on groundwater resources.

South Bay - Water

South Bay presently depends on water from the Los Osos groundwater basin underlying the ancient sand dune area of the community and Los Osos Valley. The most recent estimate of safe yield of this basin, provided in the Brown and Caldwell Report of 1974, ranges from 1,300 to 1,800 acre-feet per year. The high figure is based on optimum location of wells and balanced pumping.

Net urban demand added to net agricultural demand has already exceeded the lower safe yield limit of 1,300 acre-feet per year cited in the Brown and Caldwell study. The maximum safe yield limit of 1,800 acre-feet per year will be attained when the population reaches 12,600, assuming only modest increases in irrigated agricultural uses. Continued irrigation is realistic since Coastal Act policies require protection of agricultural uses.

A Level II severity for water supply may exist in South Bay. The lead time necessary to plan and construct an imported water supply system from Nacimiento Lake, the most likely source, is estimated to be seven years. Hence, if safe yield estimates are correct, growth of South Bay will be limited until alternative water supplies are made available. In the interim until completion of a Resource Capacity Study, priorities must be established on where the limited resources are allocated to assure opportunities for visitor-serving use, protection of agricultural users, and reservation of available water to existing subdivided portions of the community. Where additional surplus above these resources are identified, allocation to further development must also be addressed.

Water sources needed to serve total build-out would include importation from either Nacimiento Lake or the State Water Project. The County Service Area No. 9 Advisory Group has submitted requests for State or Nacimiento Lake water totaling 2,000 acre-feet per year. This amount should offset the potential water deficit that would result from buildout of the community.

4. Morro Bay Area Water Supply.

Water supply and demand for the City of Morro Bay is of interest in this plan because groundwater in the Morro Creek and Chorro Creek Basins is used by property owners in the unincorporated area east of Highway 1, as well as by the city. The City of Morro Bay has historically been very concerned about sufficient water supplies. However, two additional sources of supply, State Water and the desalination facility, should enable Morro Bay to provide water to serve its build-out population. Projected buildout for the area east of the city envisions an increase of about 8 percent in the use of water for agriculture and private domestic use. With Morro Bay relying on a combination of State water and groundwater to serve the anticipated increase in demand, and with desalination for use in drought situations, groundwater supplies should be sufficient to serve the area east of the city.

Morro Bay and Fringe Area - Water

The city of Morro Bay is served by wells drawing water from the Morro and Chorro Creek groundwater basins. The city of Morro Bay is served by wells drawing water from the Morro and Chorro Creek groundwater basins. The "Preliminary Water Management Plan" released February 1981, prepared by Brown and Caldwell Consulting Engineers, is the most current study of the groundwater resources in the basins. The plan addresses the city's water needs to the year 2000 as well as rural domestic and agricultural water demand.

The California Department of Water Resources had estimated in 1975 that the total safe yield from both basins was 3400 acre-feet per year. The l98l Brown and Caldwell report estimates an outflow from both basins at 5,490 acre-feet per year. Since present water demand is 3,944 acre-feet, and the plan did not find evidence of sea water intrusion, the safe yield is apparently at least 3,944 acre-feet. The water management plan describes programs and water management methods that are anticipated to prevent water deficiencies until the year 2000, provided that the water demands estimated from population projections and anticipated agricultural usage prove to be an accurate indication. The recommended programs are generally outlined below:

1. Better groundwater basin recharge should be accomplished through the use of percolation basins.

2. Wastewater reclamation should be used in place of groundwater for some agricultural lands and the Morro Bay Golf Course.

3. Modification of groundwater extraction by drilling of new wells and changes in the frequency of well pumping.

Also contained in the plan are water management strategies for various drought conditions including: collecting of storm water for recharge, purchase of surplus water from Whale Rock Reservoir, reduction of leakage from the water distribution system, water conservation measures, wastewater reclamation, and importation of supplemental waters.

Morro Bay - Water

The city is presently served by 15 wells within the Morro and Chorro Creek drainage basins, although two are used only on an emergency basis. Both basins have limited storage capability above sea level. Present estimates of water availability indicate a maximum safe yield of 3,944 acre-feet to serve both agricultural and urban uses. In the past, the well water supply has been augmented by contracted quantities from Whale Rock Reservoir.

Water resources were adversely affected by the recent drought conditions that occurred throughout most of California. The city has adopted several policies to handle such water shortages, including: 1) a mandatory 20% water reduction program; 2) a building permit review which allows building permits to be issued in accordance with historical trends for similar uses; and 3) a policy to allow no further subdivisions or annexations until these strategies are successful in relieving present water shortages. The city is currently studying the use of wastewater from the sewage treatment plant to help replenish the Chorro Creek groundwater basin. The "Preliminary Water Management Plan" prepared by Brown and Caldwell is the most current study of the groundwater resources in the basins. The plan addresses the city's water needs to the year 2000 as well as rural domestic and agricultural water demands. The plan describes programs and water management methods that are anticipated to prevent water deficiencies until the year 2000, provided that the water demands estimated from population projections and anticipated agricultural usage prove to be accurate indications.

The main questions concerning a long-term permanent solution to providing supplemental water to the city of Morro Bay remain unanswered. The city has supported a program to develop and deliver supplemental water from Nacimiento Reservoir. In November 1976, the required bond election to provide monies for this project was defeated. Based in part on projected costs, it can be assumed that the city of Morro Bay cannot bear the cost of the project alone and is dependent upon the combined efforts of surrounding communities. Similarly, the alternative of providing supplemental water through the construction of the necessary facilities to tie into the State Water Project has not been resolved and will require the cooperative efforts of communities in San Luis Obispo and Santa Barbara Counties.

B. Sewage Disposal

Policy: Monitor sewage flows through the Resource Management System to assure that new development can be accommodated by sewage disposal capacities

1. Overview

Wastewater generated in Cayucos and the City of Morro Bay is collected in a conventional underground sewer system and conveyed to the Morro Bay treatment plant. The balance of the planning area, including rural areas and the community of Los Osos, is served by individual septic systems or small package treatment plants. However, a community sewer system is being planned by the Los Osos Community Services District to serve much of the Los Osos urban area.

2. Cayucos Sewage Disposal

Capacity of plant/current flow. Sewage from Cayucos homes and non-residential uses is collected in a conventional underground community system of laterals and sewer mains for transport to the City of Morro Bay sewage treatment plant. Current plant capacity is 2.06 million gallons per day (mgd, average dry-weather flow). Through a joint powers agreement between the city and the Cayucos Sanitary District, Cayucos is entitled to use 0.944 mgd, and 1.416 mgd is reserved for Morro Bay. For the year ending June 30, 2001, Cayucos used about 27 percent of its entitlement. Total combined flow for Cayucos and Morro Bay was about 98 percent of plant capacity.

Projected flow at buildout. If it is assumed that the amount of wastewater flow has a fairly constant relationship to water demand, future flow can be estimated using estimates of water demand. Using this methodology, Cayucos' average dry-weather wastewater flow at buildout would range from about 0.318 mgd (assuming 61.5% occupancy for existing development and 95% occupancy for new development) to about 0.401 mgd (assuming 80% and 95% occupancy for existing and new development, respectively). These flow estimates are well within the community's current entitlement to capacity of the Morro Bay treatment plant, so that no additions to the plant would be necessary to serve Cayucos' buildout population. However, expansion of the plant will be necessary to handle the increasing flow from the city of Morro Bay.

Cayucos - Sewage Disposal

The Cayucos Sanitary District provides sewage collection and disposal service for Cayucos. Wastewater is collected and transported to the Morro Bay Sewage Treatment Plant for treatment and disposal. The joint powers agreement allots 40% of the treatment plant capacity to Cayucos; however, Cayucos is using a substantially lower portion.

A 2-1/2 year moratorium on development in Cayucos was recently lifted. Difficulties within some parts of the existing system (some of which are still being improved) include gravity line capacity problems at some critical locations, failure of pumping station due to flooding and inadequately sized pumps, excessively high rates of rainwater infiltration into the system, and the need for extending the Morro Bay treatment plant ocean outfall to a much greater depth to meet water quality standards.

Cayucos - Sewage Disposal

Sewage disposal in Cayucos is by the Cayucos Sanitary District. Sewage is treated at the Morro Bay sewage treatment plant and wastewater is released to the ocean. The joint powers agreement between the district and the city of Morro Bay allots 40% of plant capacity to Cayucos.

The sewage treatment plant was originally designed in 1964 to accommodate 1.7 million gallons per day (mgd). However, inadequacy and obsolescence of the collection system, treatment plant, and the ocean outfall resulted in a moratorium on new sewer connections until these problems are resolved. A currently-effective cease and desist order requires full compliance with water quality standards by 1982.

The first stage of expansion of the sewage treatment plant, based on a 10-year projected population of 15,500 for both Morro Bay and Cayucos, will provide a total capacity of 2.4 mgd. The sewage outfall line is designed to accommodate the projected discharge over a 20 year period, which would allow for a combined population of 19,500 people. In the redesign of the treatment plant, the use of reclaimed wastewater for sprinkler irrigation is being considered and may be used in amounts of 500 to 1,000 acre-feet per year to irrigate agricultural land in Chorro Valley and the golf course at Morro Bay State Park.

The 40% sewage treatment plant capacity allotted to Cayucos will meet the community's needs well beyond year 2000. Hence, there will be no resource severity levels within the span of this plan once the current improvements are completed; however, this assumes that the allocations of plant capacity will be available following plant expansion.

B. SEWAGE DISPOSAL

Currently-used methods of sewage disposal in the Estero Planning Area include septic tanks in South Bay and rural areas, and community sewage systems with treatment facilities serving Cayucos and Morro Bay.

Sewage Disposal

Morro Bay and Cayucos are the only areas that are presently sewered in the conventional manner. Disposal is handled through an ocean outfall line. Major improvements and expansion of this system are necessary in the near future. Two subdivisions in the South Bay area -- Vista de Oro and Bayridge Estates -- have conventional sewer collection facilities but treatment and disposal of effluent is by community septic tanks and leach fields.

The remaining agricultural/rural areas and the community of South Bay are served by individual or septic tanks. Suburban and rural areas should remain at densities that permit the continued safe usage of septic tanks. The South Bay area is presently being monitored to determine the impact of individual septic tanks on the groundwater of the Los Osos basin. A prohibition on septic tanks, imposed for 1974, has been set aside pending completion of these studies. A decision to convert to a central sewage disposal system would have a substantial impact on availability of local groundwater supplies because septic systems ultimately return a high proportion of the water to the groundwater basin for re-use.

Morro Bay - Sewage Disposal

The city of Morro Bay operates a secondary treatment plant and 16-inch ocean outfall which it owns jointly with Cayucos. Morro Bay has an allotment for 60% of the 1.7 million gallons per day treatment plant capacity and is nearing maximum capacity. A grant program to expand the present plant capacity and to correct water quality problems regarding the present outfall line is under consideration. The proposed program would provide adequate capacity for a 10-year period, based on current projections of future growth. Water quality problems have been identified in the present outfall line and a program to extend this line to 4,000 feet off-shore at a depth of 60 feet has been adopted. Some of the treated wastewater may be reclaimed and used for irrigation purposes. Completion of both of these projects will ensure the provisions of adequate sewage disposal for the foreseeable future.

Morro Bay and Fringe - Sewage Disposal

Both Morro Bay and Cayucos are served by the sewage treatment plant located in Morro Bay. Plant improvements are described in the next section on the Cayucos sewage disposal system. The city will need to resolve current water supply and sewage disposal problems before development can occur.

Present improvements in sewage plant capacity are designed to provide for anticipated growth over the next ten years. According to current population projections, the indicated capacity may suffice for a longer period of time. The capacity could also be extended a few years if allotments between Cayucos and Morro Bay are renegotiated.

3. Los Osos Sewage Disposal.

Los Osos currently relies solely on septic tanks for sewage disposal. According to the Regional Water Quality Control Board (RWQCB), percolation from septic tank leach fields is high in nitrates. As population has grown, nitrate levels in groundwater have gradually increased to the point where they have exceeded the State's maximum level allowable for drinking water in the upper aquifer. In response to this condition, the RWQCB established a prohibition zone in 1988 that covers much of the urban area, within which discharge from septic systems is not allowed, with limited exceptions.

The Los Osos Community Services District is planning to build a community sewer system that will serve most of the area within the prohibition zone and that is intended to remedy the water quality problem identified by the RWQCB. An Assessment District has already been approved by local voters to help fund the sewer project. The proposed project includes conventional sewers for collection of sewage, a covered, mostly sub-surface hybrid extended aeration wastewater treatment plant that relies primarily on natural systems to treat effluent, and a disposal system that uses sub-surface leach fields to recharge the upper and lower groundwater aquifers. The project also includes a septic system management program for the uncollected portion of the community. Besides meeting State water quality standards, the project is intended to provide several benefits, such as reducing seawater intrusion, minimizing septic tank discharge to the Morro Bay Estuary, recharging groundwater to increase the safe yield of the groundwater basin, making recycled water available for irrigation, and providing an area for a centrally-located, future park in connection with the wastewater treatment plant.

The proposed wastewater treatment plant is designed to have a capacity to treat an average daily dry weather flow of about 1.2 million gallons per day (mgd), as adjusted to account for a planned water conservation program. This capacity could serve a population of about 18,200 residents within the area to be served by the sewer system. That population closely corresponds to the estimated population of about 17,800 within the sewer service area at buildout under this plan, as the small difference in the two buildout figures (less than 3 percent) is within the margin of error for such estimates. Therefore, as currently planned, the capacity of the proposed sewer system could accommodate, but not exceed the future population within the sewer service area.

The County should continue to monitor the progress of the proposed sewer project. If necessary, general plan amendments should be initiated as needed to assure that level of future development can be accommodated by the capacity of the proposed sewer system (or by septic systems if a sewer project is not built) and the safe yield of the groundwater basin without seawater intrusion (see Chapter 4, Section VI, Programs).

South Bay - Sewage Disposal

Sewage disposal is presently handled through individual or collective septic tanks. The adequacy of this method has been evaluated and the Master Water and Sewerage Plan recommends that a sewage treatment facility will ultimately be necessary to handle projected growth. At present, the need for future sewering has not been resolved. Monitoring of conditions of groundwater degradation, particularly concentration of nitrates, should be continued to provide current information upon which to reevaluate the implications of retaining septic systems. Of additional importance is the interrelationship of groundwater recharge, through the present use of septic systems, to the safe yield analysis of water resources. The transition from septic systems to a central sewage treatment facility will withdraw this water recharge and place the burden onto remaining water supplies, necessitating earlier importation of water. A "Clean Water Grant" study is now underway. It will determine the seriousness of the degradation problem and if necessary, an appropriate solution.

South Bay - Sewage Disposal

Existing wastewater disposal in South Bay is by means of on-site septic tanks with leach lines. Highly permeable soils, high groundwater tables, and extensive community development have posed water quality concerns, prompting a study of the feasibility of sewering the community.
South Bay's potential problem with water supply is so closely interrelated with sewage disposal that the latter may also be determined to be at Level II severity. One of the problems with sewering is that exportation of wastewater may lead to lowering of the safe yield of the Los Osos groundwater basin and increase the risk of seawater intrusion. Wastewater from a community sewer system, however, might be sufficiently treated and returned to the groundwater basin by irrigation in the nearby Los Osos Valley. If supplemental water is imported to the community, wastewater disposal with an ocean outfall line may be the best alternative to protect groundwater quality over the long run. A Clean Water Grant to study the alternatives and possible implications of sewering may be completed soon.

C. Schools

1. Areawide

The Estero Planning Area is served by three school districts, shown in Figure 3-5. The area south of Cayucos, including Los Osos and the City of Morro Bay, is in the San Luis Coastal Unified School District. Cayucos is in the Cayucos Elementary School District and the Coast Unified School District.

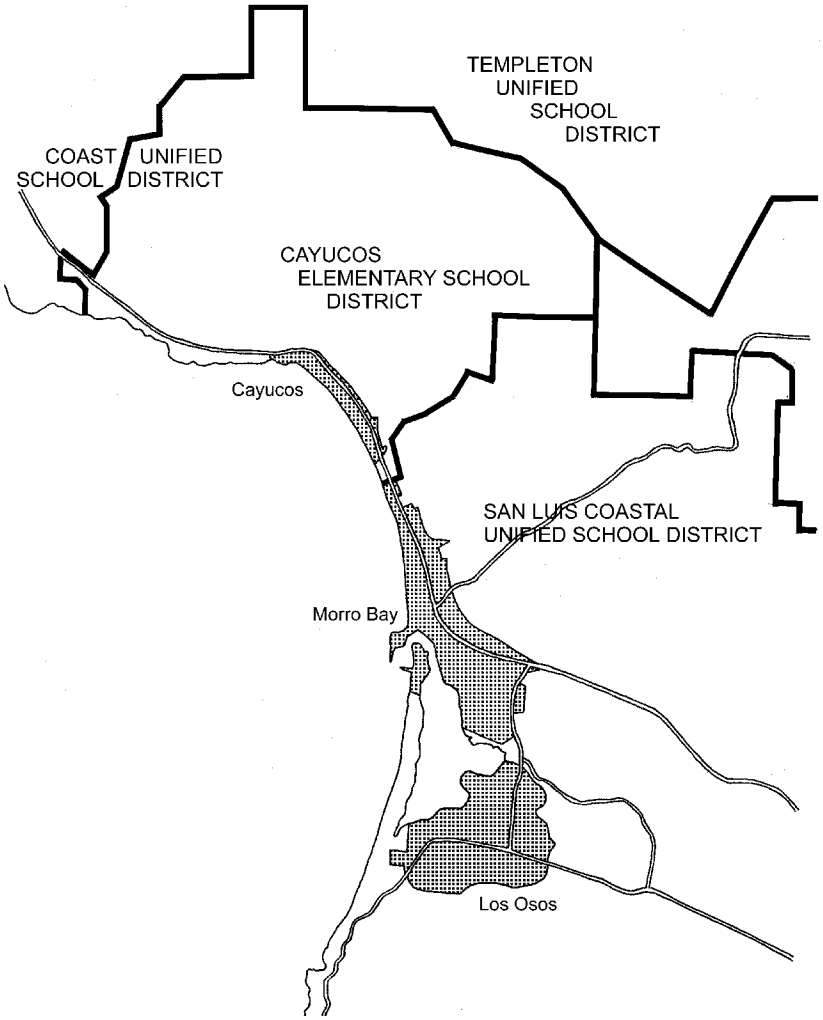

Figure 3-5: School District Boundaries - Estero Planning Area

2. Cayucos Schools

Current capacity and enrollment trends. Cayucos Elementary School District operates one K-8 school with a permanent capacity of 240 students. Enrollment during the 1993-2002 period has ranged between about 322 and 234 students. The campus lacks the facilities to provide an adequate program for middle school students. The school site's small size (3.7 acres) makes it infeasible to provide adequate physical education and athletic programs. Other core facilities are similarly undersized. The district continues to look for a suitable school site of 10 to 20 acres.

Coast Union High School and Leffingwell Continuation High School, both in Cambria, serve the entire North Coast area, including Cayucos. The 2002 high school enrollment was 375 students, including 28 at Leffingwell. Approximately 34 percent of the high school enrollment is from Cayucos. More than two-thirds of the high school classrooms are portable classrooms, many in need of replacement. In 1998, voters within the Coast Union High School attendance area approved a bond measure for construction of 12 new classrooms that will replace many of the older portables. Enrollment during the 1993-2001 period has been about 65 to 74 percent of capacity.

Projected enrollment. Enrollment projections are based on "student generation rates." These rates are expressed as the number of students at various grade levels that may be expected to live in an "average" household. Projections made by school districts can be very detailed, with different generation rates for dwelling units based on the age of a unit, as well as its size, location and price. The projections used in this plan are based on a simplified version of current student generation rates, and assume that those rates will remain constant in the future. As with other projections of resource demands, the buildout estimate varies with assumptions about dwelling unit occupancy rates. If the existing occupancy rate is maintained for existing development and the occupancy rate of new development is assumed to be 95 percent, buildout would add about 29 K-8 students and 15 high school students. The additional K-8 students would add to an already overcrowded condition. The additional high school students could be accommodated in portable classrooms. Under the assumption of a 91 percent residential occupancy rate for existing development and 95 percent occupancy for new development, buildout would add about 147 K-8 students (an approximately 62 percent increase over current enrollment) and about 78 high school students.

Cayucos - Schools

Cayucos Elementary is the only school in the community. It serves kindergarten through 8th grade; high school students are bussed to Coast Union High School in Cambria. Projected enrollment indicates that the existing facility will be adequate for at least five years. Although the present site is not conveniently located, no alternative is available and the LUE recommends that future school needs be met by expanding the present site to the north. In addition, use of joint park-school operations with adjacent Hardie Park facilities should be considered.

No levels of severity are indicated for the Cayucos Elementary School District. The school has enough capacity to accommodate growth during the 20 year span of this plan.

3. Los Osos Schools

Current Capacity and Enrollment Trends. Los Osos is in the San Luis Coastal Unified School District. Residents attend two elementary schools (one elementary school has closed) and Los Osos Middle School, all located within the community, and Morro Bay High School. Typically, about seventy percent of students at the middle school and high school come from Los Osos.

Elementary school enrollment has generally declined during the 1993-2002 period, and is currently about 72 percent of the capacity of the two remaining elementary schools. Los Osos Middle School enrollment was about 94 percent of capacity in the 2002-03 school year, while Morro Bay High School's enrollment was slightly under capacity.

Projected Enrollment. As with enrollment projections for Cayucos, the projections used in this plan for Los Osos are based on a simplified version of current student generation rates, and assume that those rates will remain constant in the future. At buildout under this plan, assuming a residential occupancy rate of 100 percent, about 245 elementary students, 120 middle school students and 185 high school students would be added, as shown in Table 3-5. With those numbers of additional students, the current capacities of the middle school and the high school would be exceeded by between about 10 and 15 percent (not including enrollment changes in the middle and high schools generated from outside of Los Osos), but the combined capacity of the elementary schools would not be exceeded.

Table 3-5: Capacity and Enrollment, Los Osos Schools

School	Capacity	Enrollment 2002-03	Projected Additional Enrollment from Los Osos @ Buildout
2 Elementary Schools (total)	1220	879	+244
Los Osos Middle School	650	610	+119
Morro Bay High School	1000	954	+186

South Bay - Schools

Rapid community growth in recent years has placed a considerable burden on existing facilities. The two elementary schools serving the area are presently at or near capacity. A junior high school east of South Bay Boulevard was completed and opened in the fall of 1977.

Projected enrollment figures indicate that a third elementary school site will be needed in the early 1980's. An eleven acre site for an elementary school was acquired in 1980 on Los Osos Valley Road near Pecho Road. Construction is not expected prior to 1985. Long-range junior high and secondary educational needs are indeterminate at this time, depending on needs of the Morro Bay area as well. Morro Bay High School presently accommodates all secondary students. Long-range consideration, however, indicates there may be a need for high school facilities in the planning area at some future time. If so, it should be located in proximity to the junior high school along a major thoroughfare.

Growth in South Bay is pushing enrollments of all schools within the local elementary and high school districts to Severity Levels II and III.

Morro Bay - Schools

The city's general plan identifies additional school sites that will be necessary as the population in the city of Morro Bay continues to grow. These are located in general areas to serve anticipated population centers.

C. SCHOOLS

The Estero Planning Area is served by several school districts. San Luis Coastal Unified School District includes two elementary schools and a junior high school in South Bay and two elementary schools and a high school located in Morro Bay. Cayucos is served by Cayucos Elementary School District consisting of a single elementary school in Cayucos and the Coast Joint Union High School District with the high school located in Cambria.

Schools in the city of Morro Bay are of two-fold significance in that future residential development of the fringe area on the east side of the city will require an additional local elementary school and projected enrollments in the junior high school and high school must consider population growth in both incorporated and unincorporated areas served.
Alternatives to overcrowding classrooms include short-term adjustments to balance the number of students where two or more elementary schools serve one community, building additional classrooms on existing school sites, or building new schools. In the levels of severity, it is estimated that a five year lead time is needed to plan, acquire sites, and build new schools.

Schools

South Bay, Morro Bay, and the surrounding agricultural areas lie within the San Luis Coastal Unified School District. The northern portion of the planning area is located within the Coast Joint-Unified High School District and includes: 1) a portion of former Fairview Elementary School District serving Old Creek; and 2) Cayucos Elementary School District serving the Cayucos area.

D. Drainage

1. Areawide Drainage

The drainage system in the Estero Planning Area consists of creeks that originate in the Santa Lucia range to the east and the Irish Hills in the southern portion of the planning area. The creeks flow generally west across the planning area and discharge into the ocean. In general, areas subject to flooding in 100-year storm events are limited to areas immediately adjacent to these creek channels and the Morro Bay estuary (see the Combining Designation maps at the end of Chapter 7). An exception is the Warden Lake area in the Los Osos Creek drainage system and the upper reaches of the creek's estuary, which are subject to standing water during periods of heavy rainfall. Other exceptions are in Los Osos, where localized flooding associated with heavy rainfall occurs at several street intersections and other low-lying areas. Also, areas downstream from Whale Rock reservoir would be subject to flooding in the event of a dam failure.

Drainage

In all, nine major natural drainage courses traverse the planning area, including Villa, Cayucos, Little Cayucos, Old, Toro, Morro, Little Morro, Chorro, and Los Osos Creeks. Most of these are noted by the application of a Flood Hazard combining designation, and specific programs and standards for protection and preservation are identified.

Morro Bay - Drainage

Drainage channels within the urban area include Morro, Little Morro, and Chorro Creeks. Much of these channels has been retained in their natural state. Future urban expansion should consider retention of these drainage areas into the design of the project. Any proposed flood control project should recognize the aesthetic and ecologic functions of these creeks.

2. Cayucos Drainage

Drainage concerns in Cayucos involve stormwater runoff and associated mudflows from the steeper slopes within and above the eastern portions of the community, as well as localized flooding from stormwater runoff in other areas. Cumulative drainage and geologic effects of existing and new development in these areas should be studied and mitigated on an areawide basis.

The floodplains of Cayucos Creek, Little Cayucos Creek and Willow Creek are limited to areas immediately adjacent to the creek channels and estuaries. In the event of the failure of Whale Rock dam, areas along the Old Creek channel would be subject to flooding and damage.

Cayucos - Drainage

Three areas in Cayucos identified as potential flood-prone areas are the lower reaches of Cayucos and Willow Creeks and a small section of Little Cayucos Creek just north of the urban area. These areas are shown on the Flood Hazard combining designations map. Localized drainage problems are primarily due to ineffective handling of storm water runoff. Many of these conditions were created when natural drainage patterns were altered with construction of the freeway.

3. Los Osos Drainage

Several street intersections and other locations in Los Osos experience localized flooding. Areas where flooding frequently occurs are shown in Figure 3-6. Other drainage concerns are runoff of sediment and pollutants into Morro Bay, which is causing adverse effects on the estuary and wetlands.

Drainage issues have been studied in the *Preliminary Engineering Evaluation, Los Osos/Baywood Park Community Drainage Project, County Service Area No. 9J*, completed in April, 1998. The study attributes drainage problems to a combination of rising groundwater levels, the existence of natural sumps, the paving of open space and subsequent reduction of the area available for stormwater infiltration, and disruption of natural surface drainage patterns by urban development. Recommended solutions include the construction of storm drains and retention basins. An assessment district for drainage purposes was approved by Los Osos voters in 1998 to maintain existing drainage facilities.

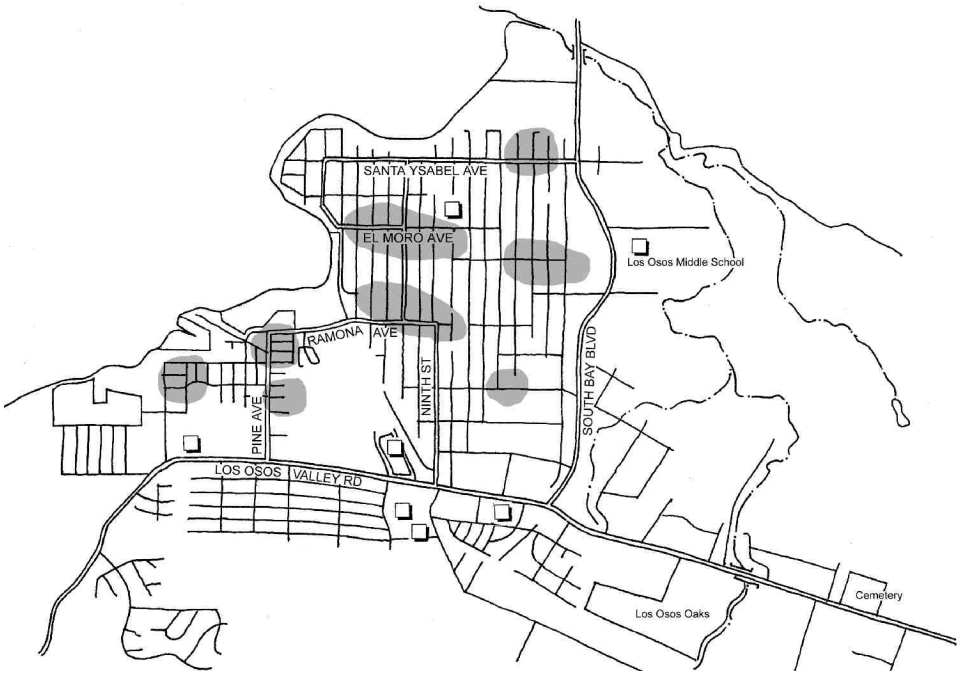

Figure 3-6: Areas Subject to Flooding - Los Osos
(Source: *Preliminary Eng. Eval. - Los Osos/Baywood Park Community Drainage Project)*

South Bay - Drainage

South Bay drains either directly to Morro Bay or by way of Los Osos Creek. From its headwaters in Clark Valley, the creek flows in a northwesterly direction to Los Osos Valley creating alluvial flats as much as half mile wide. The creek, representing the eastern edge of the old sand dune deposits, is the natural boundary delineating most of the eastern edge of the urban area. Along its path to Morro Bay, a minor tributary to Los Osos Creek maintains a small, natural impoundment known as Eto Lake.

Concern has been expressed about drainage problems in South Bay leading to increased siltation of the bay. Although the entire area is covered with deep, sandy soils conducive to surface water infiltration, the continued development of paved streets, driveways, and buildings will result in decreasing availability of exposed soils for infiltration of rainfall and runoff. An area of significant concern is south of Los Osos Valley Road where slopes gradually increase to as much as 30% and where potential problems of surface runoff and erosion go hand in hand. Solutions include requirement of on-site runoff retention basins and checking of building and development plans for excessive surface coverage by buildings, patios, and driveways.

E. Parks

1. Areawide Parks

Park and recreation facilities in the Estero Planning Area are provided by the county and by the City of Morro Bay. Neighborhood and community parks serving more densely-populated areas are generally located within the urban reserve lines of Cayucos and Los Osos and the Morro Bay city limits. Large regional parks are typically located in rural areas. The regional parks serving the Estero Planning Area include El Chorro, Heilmann and Santa Margarita. Coastal Framework for Planning contains guidelines for park acreage in relation to the size of the population. These guidelines are summarized in Table 3-6.

Table 3-6: Park Guidelines

Type of Park	Acres per 1000 people	Size Range (Acres)	Service Area Radius	Access by (Street Type)	Population of Service Area
Mini-Park	0.5	0.18 - 5	0.12-0.25 mile	Local/collector	500 to 2,500
Neighborhood	1.0	5 - 25	0.25-0.5 mile	Local/collector	2,500 to 5,000
Community	5.0	25+	1-2 miles	Collector/arterial	5,000 +
Regional	15-20	200+	< 1-hr drive	Collector/arterial	30,000 +

Source: Recreation, Park and Open Space Standards and Guidelines, National Recreation and Park Association, 1983

Regional Parks. The Estero Planning Area is served by El Chorro Regional Park. Montaña de Oro and Morro Bay State Parks and local beaches provide additional recreation areas and open space.

Neighborhood and Community Parks. It is estimated that the communities of Cayucos, Morro Bay and Los Osos have a combined total of 42 acres of neighborhood and community parks. This park acreage is augmented by school recreational facilities. The California Education Code allows community use of public school facilities and grounds, including supervised recreation activities. Although the county has no joint-use agreements with school districts, school sites are extensively used by local neighborhoods for recreation. Table 3-7 summarizes existing neighborhood and community park facilities for the Estero Planning Area and assumes that school acreage is given half credit toward meeting the acreage guideline for neighborhood parks. However, without joint use agreements, there is no guarantee that school grounds will continue to be available for public recreational use. Existing facilities are meeting only about 50 percent of the estimated current need for neighborhood and community park acreage, even when school grounds are taken into account. Proposed programs for parks are discussed in Chapter 4, Section VI, Programs.

Table 3-7: Neighborhood and Community Park Acreage
Estero Planning Area

Parks	Cayucos	Los Osos	Morro Bay
Hardie Community Park	4 acres		
Paul Andrew Neighborhood Park	1 acre		
Los Osos Community Park		6.2 acres	
Bayshore Bluffs Park			3.28 acres
Del Mar Park			10 acres
Keiser Park			8.8 acres
Tidelands Park			5.3 acres
Cloisters Park			4 acres
Community Sub-Totals	5 acres	6.2 acres	31.38 acres

School Facilities	Cayucos	Los Osos	Morro Bay
Elementary School Playgrounds	3 acres (1)	10.5 acres (3)	7.0 acres (2)
Middle School Athletic Fields		7.5 acres	
High School Athletic Fields			10 acres
Community Sub-Totals	3 acres	18.0 acres	17.0 acres
Community Totals	8 acres	24.2 acres	48.38 acres

D. RECREATION SERVICES

The Estero Planning Area contains abundant recreation land, facilities and scenic points of interest attracting both residents and tourists. Included are four state parks and beaches, two golf courses, and Morro Bay harbor. Facilities are available for camping, hiking, boating, and fishing. The scenic countryside and ocean and bay shoreline draw many sightseers to the area for recreational driving, bicycling, and walking.

Morro Bay State Park covers over 2,000 acres and provides 135 camp sites, picnic sites, an 18-hole golf course, a museum and a marina. Most of the park is located within the city of Morro Bay and will be addressed in the city's planning program. Portions of the park within the county include much of the Chorro-Los Osos Estuary and mud flats, both of which are sensitive resource areas requiring full protection. The State Department of Parks and Recreation is presently pursuing additions to the state park. Highest priority should be given to acquisition of sensitive wetland habitat.

Montana de Oro State Park, (located at the southern end of Morro Bay) is the largest park within the coastal zone, encompassing over 21.4 miles of the coast. Primarily a day use facility, the park does provide limited camping and picnicking sites. This state park has been recommended for nomination as a National Landmark. When a general development plan is proposed for the park, the following concerns must be addressed: improvement to parking facilities, development of vista points and turnouts, on-going habitat management programs, and identification of future acquisitions.

Whale Rock Reservoir will be used for limited public access for fishing. In addition to the large outdoors recreation areas are facilities within communities that are primarily oriented to community and neighborhood resident use.

Morro Bay - Parks

The principal recreation features of Morro Bay are Morro Bay State Park, its 18-hole golf course, and the bay and harbor. Although the state park is being expanded to the east and south, these new areas will likely have limited recreation use because of sensitive natural features. Atascadero State Beach is located in the northern portion of the city and provides recreational use for both residents and visitors to the area. Local parks are identified in the city's general plan.

2. Cayucos Parks

Current park acreage. Cayucos currently has 5 acres of neighborhood and/or community parks: Hardie Park (4 acres) and Paul Andrew Park (1 acre). Another small park is to be developed in the vicinity of the cemetery. In addition, Cayucos residents have convenient access to Cayucos Beach, which is considered a regional recreation facility. According to National Recreation and Park Association (NRPA) recommended guidelines, a community the size of Cayucos needs about 18 acres of neighborhood and community parks. In particular, Cayucos needs more opportunities for “active” recreation, such as ball fields, children’s play equipment, recreation programs, etc.

Projected park needs. Using the guideline of 6 acres of community and neighborhood park acreage per 1,000 residents, Cayucos will need about 28 acres to serve the estimated buildout population. Proposed programs for parks are discussed in Chapter 4, Land Use Policies and Programs.

Cayucos - Parks

Cayucos State Beach is located at the northern end of the community of Cayucos. This state beach is a major day use recreational facility. The 15 acre beach also has a fishing pier which was used by over 200,000 visitors in 1978. As a day use facility, the beach provides coastal access for tourists and local residents alike. Many utilize stairways to the beach found along Pacific Avenue.

Morro Strand State Beach is located adjacent to Pacific Avenue and Studio Drive. The 33 acre beach is an important day use facility. Limited picnic and restroom facilities are provided; however, improvements, (including additional parking) are needed to accommodate the 144,000 visitors per year.

Community park facilities at Hardie Park along Cayucos Creek include picnic tables, playground, swimming pool, and tennis courts. This park is too far for regular use by residents of southern Cayucos; hence, it is recommended that a small neighborhood park be eventually established in the Morro Strand area for persons of all ages, especially youth and senior citizens.

3. Los Osos Parks

Current park acreage. Los Osos presently has only one park in the neighborhood and/or community park category, the 6.2-acre Los Osos Community Park. In addition, Los Osos residents have convenient access to Montaña de Oro State Park, El Chorro Regional Park, and other "special" recreation facilities, including Sweet Springs Nature Preserve, Elfin Forest Natural Area, Morro Bay State Park and Golf Course, and Los Osos Oaks State Reserve. Giving half credit for school recreation facilities in Los Osos, the community has a total of about 24 acres of neighborhood and community parks. According to NRPA recommended guidelines, a community the size of Los Osos needs about 87 acres of neighborhood and community parks. In particular, Los Osos needs more opportunities for “active” recreation, such as ball fields, children’s play equipment, recreation programs, etc.

Projected park needs. Using the guideline of 6 acres of community and neighborhood park acreage per 1000 residents, Los Osos will need a total of about 118 acres to serve the projected population at buildout. Proposed programs for parks are discussed in Chapter 4, Land Use Policies and Programs.

South Bay - Parks

South Bay Park in Los Osos contains typical community park facilities including a picnic area, lawns and courts for sports, a playground, and a small meeting hall for organized groups. Other privately-owned natural areas within the community provide informal walking and nature study areas. As the community grows, additional neighborhood parks will be needed to serve local residents. Community beautification measures are recommended to enhance the quality of life and provide attractive neighborhood settings for pedestrians and bicyclists.

The 9-hole Sunset Terrace Golf Course is available for local use, while the 18-hole golf course in Morro Bay State Park is within easy driving distance from South Bay. Major outdoor recreation areas and activities are provided in the large, nearby Montana de Oro and Morro Bay State Parks.

Los Osos Oak Preserve is a small undeveloped state park within the community of South Bay containing an outstanding example of a pygmy oak forest. Only limited passive recreation is appropriate for this preserve.

F. Roads

Roads issues are discussed in Chapter 5, Circulation Element, and in the *Annual Resource Summary Report*.

D. ROADS/CIRCULATION

State Highways 1 and 41, Los Osos Valley Road, and South Bay Boulevard are the major corridors in the Estero Planning Area. The most critical problem with this existing system is the rush hour commuter traffic congestion on two-lane Los Osos Valley Road. Hazards are compounded by the mixture of high speed drivers, slower pleasure drivers, and bicyclists using the road and drivers ingressing or egressing from abutting properties. Some commuters between South Bay and San Luis Obispo have chosen to take the longer route via South Bay Boulevard and Highway 1 to avoid the congestion and hazards. Improvements are needed for the northerly portion of this road, particularly in the Twin Bridges area. Design must be sensitive to the scenic values of the area, the marshlands, and adjacent hills and peaks of the Morros.

A Level II resource capacity problem may exist on Los Osos Valley Road, even though the county recently completed improvements on the road.

Other major roads within the Estero Planning Area do not appear to be subject to any immediate problems. Morro Bay and Cayucos are growing at more modest rates and the population make-up does not contribute severely to peak traffic flows. Tourist traffic also tends to be fairly well distributed

during the day except for somewhat higher volumes in the early morning or late afternoon. The new bus system serving South Bay, Morro Bay, Cayucos, and San Luis Obispo should help to alleviate traffic congestion and accidents.

G. Solid Waste Disposal

Weekly solid waste collection service within the Estero Planning Area is provided by a private hauler. The waste is disposed of at the Cold Canyon landfill south of San Luis Obispo. The projected service life of the Cold Canyon landfill extends to about 2012. Thus, without further expansion, this landfill is expected to reach capacity prior to the horizon year of this plan update. The Chicago Grade landfill, east of Templeton, is an alternate disposal site expected to reach capacity by about 2024.

Recyclable materials are collected and processed by private disposal companies. However, more could be done to facilitate recycling, such as expanding recycling programs, including green waste recycling. Providing a local collection center/transfer facility for recyclable materials could also provide more opportunities for recycling.

Solid Waste Disposal

Solid waste disposal service is provided for all planning area communities by contract with a private garbage collection service and hauled to the Los Osos/Turri Road disposal site. Capacity at this landfill site is estimated to be adequate through year 1990. Adequate refuse pickup has been a problem in Cayucos for some time, particularly with the presence of second homes and tourist attractions. Specific programs for communities are identified in the San Luis Obispo County Solid Waste Management Program.

H. Police Service

With the exception of the city of Morro Bay, the entire coastal area, including the Estero Planning Area, relies on the County Sheriff and the California Highway Patrol for police services. The Sheriff's coast station is located in Los Osos. The Highway Patrol office is located near the California Boulevard-Highway 101 interchange in San Luis Obispo. The city of Morro Bay is served by the police station on Morro Bay Boulevard. Response times for the Sheriff's office vary, based on allocated personnel, existing resources, time and day of week and prioritized calls for law enforcement services. In 2001, the average response time for an area that includes much of the Estero Planning Area was about 15.7 minutes, according to the County Sheriff's Office.

Another measure of adequacy for police services is the ratio of deputies to population. The County Sheriff's Office has identified a ratio of one deputy per 750 residents as providing an adequate level of service. For San Luis Obispo County, the ratio in 2002 was roughly one deputy for each 1,000 residents, according to the Sheriff's Office. In comparison, the 1997 ratio for San Bernardino County was 1:1,700 and for Santa Barbara County, 1:1,600 (source: County of San Luis Obispo Sheriff's Office, as cited in the Woodlands EIR).

A portion of the fees paid by new development are used to fund County Sheriff's patrol facilities.

C. EMERGENCY AND SOCIAL SERVICES

Police Service

With the exception of the city of Morro Bay, the entire Estero Planning Area is served by the County Sheriff and the California Highway Patrol. The area is served from the county operational facility at Camp San Luis Obispo. Since response times are slow due to the large area, the plan identifies that a sheriff's substation may be needed.

I. Fire Protection

Fire protection and emergency medical assistance for rural areas are provided by the California Department of Forestry and Fire Protection (CDF), which acts as the County Fire Department by contract with the county. The CDF/County Fire stations that serve the **rural parts of the** Estero Planning Area are located south of Cayucos and west of Devil's Gap on Highway 41 in the Santa Lucia Mountains. In Cayucos, fire and related medical and rescue services are provided by the Cayucos Fire Protection District. In Los Osos, fire protection and emergency medical services are provided by **CDF/County Fire through an agreement with** ~~the South Bay Fire Department, which is part of~~ the Los Osos Community Services District (LOCSD). The Cayucos Fire Protection District, ~~the LOCSD,~~ the City of Morro Bay and CDF/County Fire maintain mutual and automatic aid agreements with each other.

For most calls within the planning area, CDF response times vary from eight to twenty minutes. Response times within the Cayucos Fire Protection District are two-to-three minutes. CDF/County Fire's fire suppression objectives are summarized in Table 3-8.

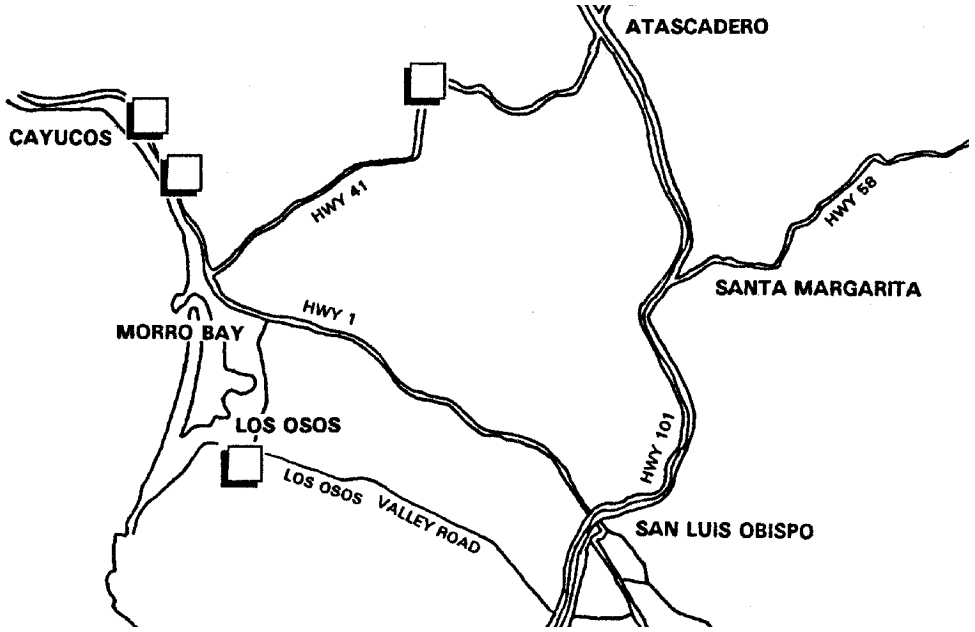

Figure 3-7: Fire Stations - Estero Planning Area

Table 3-8: Fire Suppression Objectives
CDF/County Fire

Activity	IV: Outlying Areas Low density areas outside any URL or VRL	III: Rural Areas RS densities; may be within a URL or VRL	II: Urban Areas RSF densities, 2 to 8 du/ac; within a URL or VRL	I: Heavy Urban RMF densities, 8 to 20 du/ac; within a URL or VRL
Maximum elapsed time from dispatch to first application of extinguishing agents	15 min	12 min	10 min	6 min
Maximum elapsed time from dispatch to full assignment of personnel and equipment	25 min	20 min	15 min	10 min
Maximum elapsed time from receipt of alarm to initiation of suppression action for 90% of all fires	10 min	10 min	8 min	8 min

Source: San Luis Obispo County Fire Department Fire Protection Plan, 1992

Fire Protection

Fire protection for most of the rural and agricultural areas is provided by the California State Division of Forestry. A station is located immediately south of Cayucos. The city of Morro Bay provides fire protection within the corporate boundaries. The communities of South Bay and Cayucos are served by local fire protection facilities.

South Bay - Fire Protection

The community fire station is centrally located near South Bay Village on Bayview Heights Drive adjacent to Sunnyside Elementary School. Northerly portions of the Creekside area are most distant from existing facilities, although still within two miles.

The existing location in terms of length of run should be adequate under this plan, with additional manpower and expanded on-site facilities occurring with community growth. Expansion to double the facility has recently been completed.

Cayucos - Fire Protection

Fire protection needs in Cayucos are provided by the Cayucos Fire Department, a volunteer department. The existing fire station is located at the corner of Ash Avenue and Cayucos Drive; this is convenient for the commercial areas but not for the southern portion of the community. The California State Department of Forestry has the responsibility for serving the surrounding rural areas and maintains a station under a reciprocal agreement with the district if the need arises. The existing physical facilities of the water companies are considered adequate; however, a more centralized location for the station may be appropriate in the future.

J. Emergency Medical Services

Ambulance service is provided through contract with a privately-owned company. The contract currently is with San Luis Ambulance, which has stations in Morro Bay and San Luis Obispo that serve this Planning Area. There is no hospital in the Estero Planning Area. Those located nearest to the planning area are the privately-owned French and Sierra Vista hospitals in San Luis Obispo. These facilities provide emergency room treatment as well as major medical services. The California Highway Patrol **and a private air ambulance service** provide~~s~~ ~~a~~ helicopter service for emergency transportation to the hospitals. The Cayucos Fire Protection District, ~~**the South Bay Fire Department,**~~ the Morro Bay Fire Department, and CDF/County Fire all provide emergency medical response to the areas that they serve. Surf rescue is provided by the Morro Bay Fire Department, the Cayucos Fire Protection District and CDF/County Fire. In addition, CDF/County Fire has an interagency Technical Rescue Team (TRT) that provides all types of technical rescue response, including surf rescue. Both Cayucos and Los Osos would benefit from the establishment of urgent care medical clinics in those communities.

Emergency Medical Services

Ambulance service is provided via a contract with a privately owned ambulance company through County Service Area No. 15. Although the city of Morro Bay is not included within the service area boundary, the city contracts with the district for services under a joint powers agreement.

K. Libraries

Libraries in the Estero Planning Area are located in Cayucos, in Morro Bay and in Los Osos. Measures of service for public libraries have typically been expressed as the number of books or the amount of library floor space per capita. A 1962 study, still regarded as valid by library administrators, contains a guide for estimating the need for library services, based on a survey of libraries from across the country. This information is summarized in Table 3-9.

Table 3-9: Formulas for Library Facilities by Community Size

Community Size	Book Stock (Volumes per capita)	Total Square Feet per Capita
Under 10,000	3.5 to 5	0.7 to 0.8
10,000 to 35,000	2.75 to 3	0.6 to 0.65

Source: Adapted from Practical Administration of Public Libraries, Wheeler & Goldhov, 1962

Table 3-10 summarizes the adequacy of the existing libraries in Cayucos and Los Osos, and indicates facility needs at buildout, in relation to the formulas in Table 3-8. It is clear that the existing facilities in both communities are seriously inadequate. A new 7,000 square-foot library building is planned in Los Osos.

Table 3-10: Recommended Library Facilities
Cayucos and Los Osos

	Building Square Feet		Book Stock (# of Volumes)		Recommended at Buildout	
	2002 Actual	2002 Desirable	2002 Actual	2002 Desirable	Building Square Feet	Book Stock
Cayucos	800	2100-2400	9409	10600-15200	3300-3800	16700-23800
Los Osos	3976	8700-9400	38345	39700-43300	11800-12800	54000-59100

Increasing use of computers will provide greatly expanded opportunities for people to gain access to digitized information. Libraries can improve their level of service by providing patrons with links to the information network, in addition to increasing the amount of shelf space for book storage.

Library

Rural areas are to be served by library facilities within the urban areas. Expansion of library facilities in both Cayucos and South Bay are necessary and the LUE recommends they be located in multi-use community centers.

L. Human Services

All government offices providing counseling, mental health, welfare, family planning and other human services are located in the city of San Luis Obispo.

Human Services

All human services in the planning area, with the exception of specialized monthly health clinics, are provided at the offices in the city of San Luis Obispo.

In South Bay, site selection for a government services center is being considered and the facility should be centrally located. Design of the facilities should incorporate the need for a wide range of government services besides human services, including a community meeting hall and sheriff's substation. In addition, this complex can serve as an alternative site for the branch library.

The Cayucos Veterans Memorial Building at Cayucos Beach State Park, serves as a meeting hall for local organizations. Since the building is not centrally located nor designed to serve multiple uses, a new community building should be planned for human services and library in the downtown or adjacent to Hardie Park. The Veterans Building, however, could be remodelled and parking areas improved for continued use for local group meetings.

The Morro Bay regional center is a proposed capital improvement project to consolidate existing county services for the Estero and North Coast Planning Areas in Morro Bay. Facilities would support a library, human services and a clinic.

M. Air Quality

San Luis Obispo County is designated a "non-attainment" area for the California ozone and PM_{10} (fine particulate matter 10 microns or less in diameter) air quality standards. In response to this condition, the Board of Supervisors has certified a Resource Management System Level of Severity II for countywide air quality. Since 1982, air monitoring stations throughout the county have recorded ozone and PM_{10} levels in excess of the State standard. According to Air Pollution Control District data, the number of days exceeding the State ozone standard over the past decade has not varied greatly at most stations, while the number of days exceeding the State PM10 standard has remained fairly stable or declined at most stations. Over the past 11 years at the Morro Bay monitoring station, there have been relatively few days exceeding the State standards for ozone and PM_{10} concentrations. Ozone and PM_{10} levels recorded at the Morro Bay monitoring station in the Estero Planning Area and at the Nipomo and Paso Robles monitoring stations (for comparison) are shown in Tables 3-11 and 3-12.

The California Clean Air Act requires that non-attainment areas reduce their air pollution emissions by at least five percent per year, or 15 percent averaged over three years, from 1987 baseline levels. The law further requires the local Air Pollution Control District to adopt a plan to demonstrate how the required reductions will be achieved.

Table 3-11
Number of Days Exceeding State Ozone Standard

Location	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Morro Bay	1	1	0	0	0	0	0	0	1	0	0
Nipomo	0	0	1	0	0	1	0	N/A	0	0	0
Paso Robles	0	0	0	1	5	9	0	25	1	0	0

Source: San Luis Obispo County Air Pollution Control District

Table 3-12
Number of Days Exceeding State PM10 Standard

Location	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Morro Bay	0	0	2	0	0	0	1	0	0	0	0
Nipomo	0	0	1	1	1	0	N/A	0	0	0	2
Paso Robles	4	2	2	0	3	0	1	1	1	2	2

Note: PM_{10} measurements are taken once every six days, or sixty times per year. Thus, a year in which the standard was exceeded on six days would have exceeded the standard on 10% of all measured days
Source: San Luis Obispo County Air Pollution Control District

The San Luis Obispo County Clean Air Plan was adopted by the Board of the Air Pollution Control District in 1992. The Plan includes a detailed description of the pollutants affecting the county, future air quality impacts to be expected under current growth trends, and appropriate strategies to reduce ozone precursor emissions, thereby improving air quality. The county implements the transportation and land use planning strategies recommended in the Clean Air Plan by incorporating these strategies into the Land Use and Circulation Elements of the County General Plan; for example, through updates of the area plans.

An overall goal of the Clean Air Plan is to reduce the growth of vehicle trips and miles traveled in urban areas to the rate of population growth within San Luis Obispo County. Adopting the following land use and circulation policies and programs will assist in reaching this goal: planning compact communities, providing for mixed-use development, balancing jobs and housing, increasing transit use, promoting bicycling and walking, and managing traffic flow. All of these measures are included in this area plan.

III. PROGRAMS

"Programs" are recommended non-mandatory actions to achieve community or areawide objectives identified in this plan. Implementation of each program is the responsibility of the county or other public agency identified in the program itself and in the table at the end of this chapter. Because programs (some of which include special studies) are recommended actions rather than mandatory requirements, implementation of any program should be based on consideration of community needs, community support and available funds.

The following programs are grouped under headings by type of resource or service.

E. PLANNING AREA SERVICE PROGRAMS

"Programs" are non-mandatory actions or policies recommended by the Land Use Element to achieve community or areawide objectives identified in this area plan. The implementation of each LUE program is the responsibility of the community, through the county or other public agency identified in the program itself. Because programs (some of which include special studies) are recommended actions rather than mandatory requirements, implementation of any program should be based on consideration of community needs and substantial community support for the program and its related cost.

The following public service programs are grouped under headings to indicate the type of service concern they each address.

A. Water

Los Osos

1. **Water Management--Los Osos Groundwater Basin.** The water purveyors within the Los Osos groundwater basin should do all of the following:

    a. Pursue water conservation measures and water recycling programs to assure that the existing groundwater supply can serve the expected buildout population

    b. In consultation with owners of rural and agricultural properties, estimate water demand from agricultural irrigation and private wells, as well as urban demand, to confirm water use estimates

2. **Reevaluation of Buildout.** After a groundwater study of the Los Osos groundwater basin has been completed and the effects of a communitywide sewer system are better understood, the county should reevaluate the Estero Area Plan with regard to the ability of the sustainable yield of the Los Osos groundwater basin to support the buildout population of Los Osos.

16. **Water Management.** Based on community initiation, the county Engineering Department should work with communities, property owners and the Regional Water Quality Control Board to develop and implement a basin-wide water management program for South Bay which addresses population levels in relation to water availability, groundwater quality, and the need for alternative liquid waste disposal plans.

Cayucos

3. **Supplemental Water.** CSA 10A and applicable water purveyors should continue to pursue obtaining supplemental source(s) of water to accommodate buildout.

4. **Water Conservation.** The Cayucos water purveyors should set a goal of reducing total residential water demand by at least 20% and should cooperatively implement conservation programs involving measures such as public education, leak detection, landscape conversion, and various retrofit programs. For example, the water purveyors should jointly develop a voluntary program for retrofitting existing dwellings and businesses in order to earn additional water units and enable additional development within applicable growth management limitations.

5. **Consolidation of Water Purveyors.** The county, water purveyors, community, and LAFCo should study the possibility of consolidating all the water purveyors in a way that would be cost-beneficial to the community as a whole.

6. **Graywater Recycling.** The county should work with the public to encourage development and use of large-scale graywater recycling projects for irrigation in new development.

7. ~~8.~~ **Consolidation - Cayucos.** The county and the community should work with LAFCo to consolidate all urban services and facilities in Cayucos into a single comprehensive service district . **RETAIN THIS EXISTING PROGRAM**

Rural Area

8. ~~7.~~ **Agricultural Water Supplies.** Maintain the quantity and quality of ground water resources currently consumed by production agriculture. Where sources of adequate wastewater quality are available, develop a program with appropriate agencies to use treated wastewater for irrigation.

10. **Agricultural Water Supplies.** Explore possibilities for increasing water supplies for agriculture through the formation of a new district (or annexation to an existing district) in order to ensure an adequate and economical water supply for agricultural uses.

9. ~~8.~~ Water Management--Chorro & Morro Basins. The county and city of Morro Bay should jointly develop a groundwater management program that results in cooperative planning among affected agencies. The program should encourage better recharge through use of percolation basins and consider drilling of new wells and changing the frequency of well pumping.

1. Areawide Study. The county Engineering Department should undertake detailed drainage studies for the entire planning area, considering runoff problems in the context of the entire watershed, and recommending any measures needed to avoid problems associated with impervious surfaces and other site development. Drainage systems should be designed to promote groundwater recharge, and to protect and enhance natural features of the area, particularly Morro Bay.

9. Services Provided - Zone of Benefit B. The location of the South Bay urban reserve line is not to affect the services presently provided in Zone of Benefit B, CSA #9 at the time of adoption of the Land Use Element.

11. Alternative Water Sources. Supplementary water such as reclaimed sewage effluent and water from existing impoundments should be used to prevent overdraft of groundwater. New impoundments for recharging underground basins should be care- fully considered along with other alternatives.

17. Well Sites. The county Engineering Department should locate and reserve future well sites in the South Bay area to optimize safe withdrawals from the groundwater basin before development fills in the most favorable sites.

B. Wastewater

1. Wastewater Recycling. Sewage disposal agencies should work with the County Public Works and Health Departments and the Regional Water Quality Control Board to develop a program to find alternative uses for treated wastewater, such as irrigation (e.g. on agricultural lands and the Morro Bay Golf Course), groundwater recharge, and environmental enhancement.

15. Wastewater Recycling - Cayucos. The Cayucos Sanitary District should work with the county Engineering and Health Departments and Regional Water Quality Control Board to develop a program to use treated wastewater from existing and future sewage treatment plants in the planning area for irrigation and groundwater recharge.

12. Sewage Disposal and Water Supply - Cayucos. The Cayucos Sanitary District should complete plans and projects to improve functioning of the Cayucos sewage disposal system. Extension of sewer and water facilities is discouraged outside the urban reserve line.

13. Sewage Disposal - South Bay. The county should study the future need for a community sewer system in South Bay in relation to the extent and density of development and its impact on ground- water quantity and quality.

C. Schools

1. **School Sites--Los Osos.** San Luis Coastal Unified School District and the county should jointly study educational facility needs in Los Osos. A high school in Los Osos could accommodate the expected future increase in student population, and reduce traffic and air pollution caused by vehicle trips to Morro Bay High School. School sites should be acquired in a timely manner.

2. **Elementary School Site--Cayucos.** Cayucos Elementary School District and the county should cooperate in evaluating and selecting an appropriate site for a new elementary school located as close as possible to the existing urban reserve line.

3. **School Closures.** When schools are planned to be closed, the applicable school districts should consult with the County Planning and Building and General Services Departments regarding future ownership and use of the sites.

7. **School Sites.** The county and school district should jointly study educational facility needs in South Bay and acquire school sites before private development overly restricts choices in location.

6. **Hardie Park - Joint Use.** A joint powers agreement should be executed between the school district and the county for the joint use of the recreational facilities at Hardie Park.

D. Drainage

1. **Cayucos Drainage Plan.** The County Public Works Department should **seek funding to implement the** ~~**facilitate preparation of a**~~ master drainage plan for Cayucos to ~~**identify and implement measures to**~~ prevent flooding, mudflows and associated storm damage**,** **while** ~~**The drainage plan should include as key components provisions to recharge groundwater and**~~ maintain**ing** natural drainage courses ~~**so that they can handle storm water runoff. The drainage plan should**~~ **and** tak**eing** into account **groundwater recharge and** ~~**the**~~ cumulative drainage and geologic impacts of future development.

PLEASE REFER TO CHAPTER 6, SECTION VII FOR PROGRAMS ABOUT RUNOFF CONTROL AND A DRAINAGE PLAN IN LOS OSOS

4. **Fire Response Time.** Fire protection service response times should be improved for the southern portion of Cayucos through agreements with State Department of Forestry to make first response. The agreement could be terminated when a new fire station is centrally located within the community.

E. Government and Community Services

1. **Community Center--Cayucos.** The county should create a master plan and explore ways to finance expansion and use of the Veterans Memorial Building for multiple purposes, such as recreation, public assembly, the arts~~, and a substantially expanded library~~.

2. **Community Services Center--Los Osos.** Government functions in Los Osos should be concentrated into a centrally located, user-friendly services center near the community park. The center should include a community hall, sheriff's substation, and medical and social services.

3. **Cayucos Veterans Building.** The county should remodel the Cayucos Veterans Memorial Building and expand the parking area to serve increasing needs for community meeting space.

5. **Government Services Center - South Bay.** Government functions in South Bay should be concentrated into a centrally located services center which could include such facilities as a community hall, library, sheriff's substation, and medical and social services.

F. Underground Utilities

1. **Undergrounding--Cayucos & Los Osos.** The county Underground Utilities Committee should work closely with the communities of Cayucos and Los Osos to facilitate undergrounding of overhead utility lines.

14. **Undergrounding - Cayucos & South Bay.** The county Underground Utilities Committee should evaluate and prioritize Cayucos and South Bay areas for the undergrounding of overhead utility lines.

G. Recycling

1. **Recycling/Green Waste.** The county should expand recycling and greenwaste recycling programs to cover the entire Estero Planning Area, and should encourage the Cayucos Sanitary District to establish a program for curbside collection and recycling of green waste.

Table 3-13: Schedule for Completing Recommended Programs for Public Facilities, Services, Resources

The following table summarizes the preceding recommended programs to be implemented by the county or other public agencies. In the table, the first column, "Topic/Program No.," identifies the program by its number in the preceding text. The second column, "Program," identifies the subject of the program. The column under "Responsible Agencies" lists which public and/or private agencies have primary responsibility for carrying out each program. The column, "Potential Program Funding," lists potential sources of funding for each program. The column, "Time Frame," identifies whether each program is expected to be carried out over a short, medium, or long-term period, or whether the program requires an on-going effort. The column, "Target Date," lists the estimated date by which each program should be implemented. The last column, "Priority," ranks each program according to whether it has a high, medium or low priority for implementation. This will help decision makers and the public decide how to allocate limited funds. A key to abbreviations used in the table is located at the end of the table.

TOPIC/ PRO-GRAM NO.	PROGRAM	RESPONSIBLE AGENCIES	POTENTIAL FUNDING	TIME FRAME	TARGET DATE	PRIORITY
A. WATER						
A1.	LOS OSOS WATER MGMT	PUB. WORKS, CO. HEALTH, RWQCB, WATER PURVEYORS	COUNTY	SHORT-TERM	2005	HIGH
A2.	BUILDOUT REEVALUATION	CO. PLANNING	COUNTY	SHORT-TERM	**	HIGH
A3.	SUPPLEMENTAL WATER	CSA 10A, WATER PURVEYORS	CSA 10A, WATER PURVEYORS	ON-GOING	ON-GOING	HIGH
A4.	CONSERVATION-CAYUCOS	WATER PURVEYORS	WATER PURVEYORS	SHORT-TERM	2005	HIGH
A5.	CONSOLIDATION OF PURVEYORS - CAYUCOS	PUB. WORKS, WATER PURVEYORS, LAFCO	COUNTY, WATER PURVEYORS	MED.-TERM	2010	MEDIUM
A6.	GRAYWATER RECYCLING	CO. HEALTH, CO. PLANNING	GRANTS	LONG-TERM	2010+	MEDIUM
A7.	**CAYUCOS CONSOLIDATION**	**COUNTY, LAFCo**	**COUNTY, LAFCo**	**SHORT-TERM**	**2005+**	**MEDIUM**

TOPIC/ PRO-GRAM NO.	PROGRAM	RESPONSIBLE AGENCIES	POTENTIAL FUNDING	TIME FRAME	TARGET DATE	PRIORITY
A. WATER						
A8. ~~**A7.**~~	AGRICULTURAL WATER SUPPLIES	PUB. WORKS, SEWAGE DISPOSAL AGENCIES	GRANTS, LAND OWNERS	MED-TERM	2010	MEDIUM
A9. ~~**A8.**~~	CHORRO, MORRO BASINS	PUB. WORKS, CITY OF MORRO BAY	COUNTY, CITY OF MORRO BAY	MED-TERM	2010	MEDIUM
B. WASTEWATER						
B1.	WASTEWATER RECYCLING	PUB. WORKS, CO. HEALTH, RWQCB, SEWAGE DISPOSAL AGENCIES	GRANTS, COUNTY, LAND-OWNERS	MED.-TERM	2010	MEDIUM
C. SCHOOLS						
C1.	SITES - LOS OSOS	CO. PLANNING, SLO COASTAL	SLO COASTAL	ON - GOING	ON - GOING	MEDIUM
C2.	ELEMENTARY SITE - CAYUCOS	CAY. ELEM., CO. PLANNING	CAY. ELEM.	ON - GOING	ON - GOING	HIGH
C3.	SCHOOL CLOSURES	SCHOOL DISTRICTS, CO. PLANNING, CO. GEN. SVCS.	N/A	ON-GOING	ON-GOING	MEDIUM
D. DRAINAGE						
D1.	CAYUCOS DRAINAGE PLAN	PUB. WORKS	COUNTY, LAND-OWNERS	**MED.-TERM** ~~**SHORT TERM**~~	**2010** ~~**2005**~~	HIGH

TOPIC/ PRO-GRAM NO.	PROGRAM	RESPONSIBLE AGENCIES	POTENTIAL FUNDING	TIME FRAME	TARGET DATE	PRIORITY
E. GOVERNMENT AND COMMUNITY SERVICES						
E1.	COMMUNITY CENTER - CAYUCOS	CO. GEN. SVCS.	FACILITIES FEES, COUNTY	SHORT TERM	2005	MEDIUM
E2.	COMMUNITY SERVICES CENTER - LOS OSOS	CO. GEN. SVCS.	FACILITIES FEES, COUNTY	LONG TERM	2010+	MEDIUM
F. UNDERGROUND UTILITIES						
F1.	CAYUCOS & LOS OSOS	COUNTY UNDERGROUND UTILITIES COMMITTEE	GRANTS, ASSESSMNT DISTRICTS	ON - GOING	ON - GOING	HIGH
G. RECYCLING						
G1.	RECYCLING/ GREEN WASTE	PUB. WORKS	FEES	SHORT-MED.-TERM	2005-2010	MEDIUM

Key to Abbreviations

**	THREE YEARS AFTER THE LOS OSOS COMMUNITY SEWER SYSTEM IS OPERATIONAL
CO. PLANNING	COUNTY DEPT. OF PLANNING AND BUILDING
CO. HEALTH	COUNTY HEALTH DEPARTMENT/ENVIRONMENTAL HEALTH
PUB. WORKS	COUNTY PUBLIC WORKS DEPARTMENT
CO. GEN. SVCS.	COUNTY DEPT. OF GENERAL SERVICES
RWQCB	REGIONAL WATER QUALITY CONTROL BOARD
LAFCO	LOCAL AGENCY FORMATION COMMISSION
WATER PURVEYORS	(CAYUCOS) CSA#10A; MORRO ROCK MUTUAL; PASO ROBLES BEACH MUTUAL
WATER PURVEYORS	(LOS OSOS) LOCSD; CAL CITIES WATER CO.; S & T MUTUAL WATER CO.
CAY ELEM	CAYUCOS ELEMENTARY SCHOOL DISTRICT
SLO COASTAL	SAN LUIS COASTAL UNIFIED SCHOOL DISTRICT